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Oil, Paint and Drug Reporter

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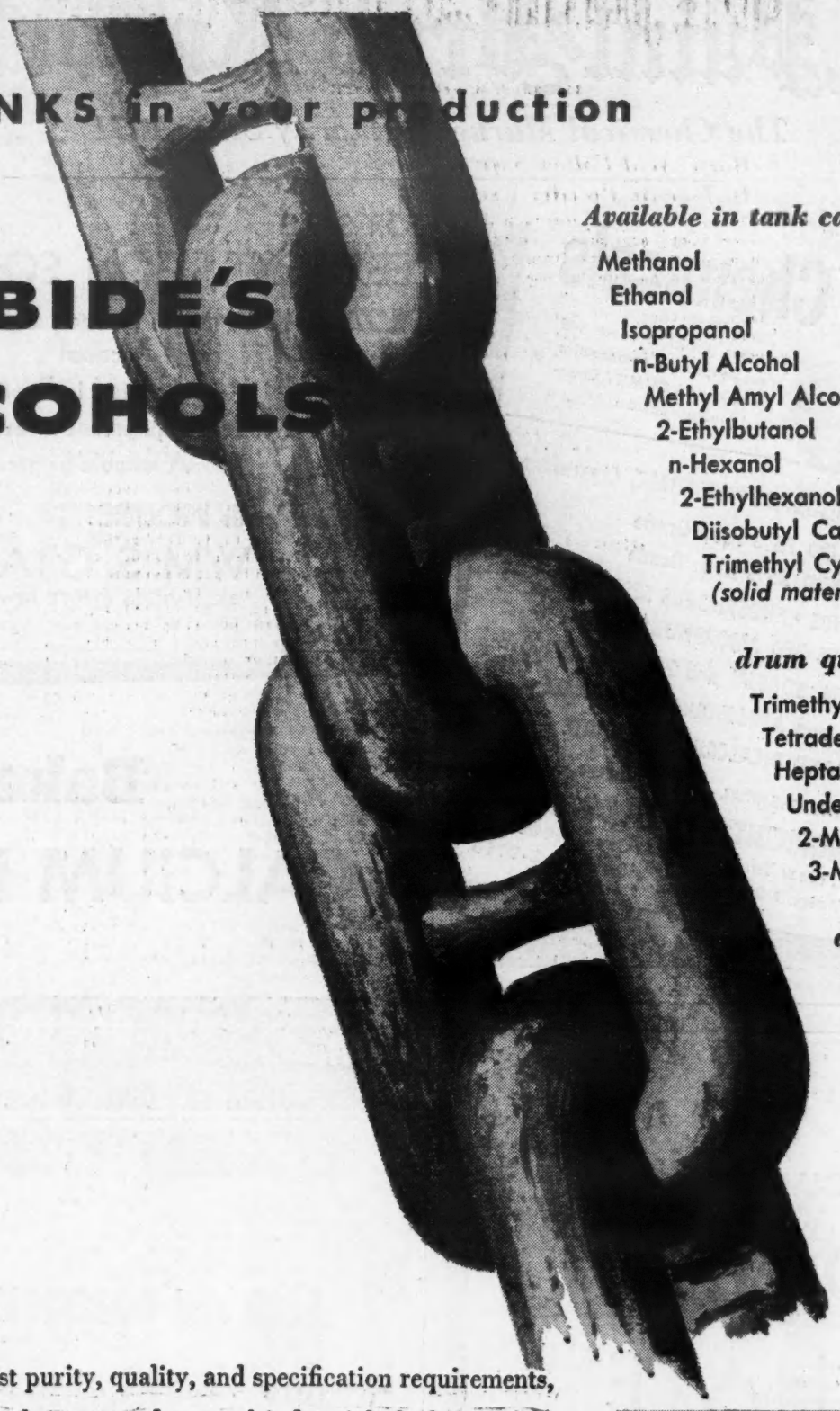

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Oil, Paint and Drug Reporter

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Veterinary Drugs Plan Drops Censorship Idea

A new draft of the proposed regulations covering special licenses for marketing new veterinary biological products, which abandons the earlier provisions for censorship of advertising, has been drawn up within the Department of Agriculture and is now before Secretary Ezra Taft Benson for review.

It is understood that industry will be given another opportunity to comment on the rules before they are issued in final form. Text of the new tentative draft is to be published in the *Federal Register* at an early date for industry comment.

Vigorous protests of the veterinary drug manufacturers and others led to the decision dropping the provisions for censoring advertising, it was said. As originally drawn, a manufacturer of a new biologic for veterinary use could not advertise this fact until his advertisement had first been passed upon by the regulatory authorities.

Advertising Date Rules Eased

Under the proposed new draft, the manufacturer can begin his advertising campaign as soon as he gets his special license, but he must not make claims for the product which exceed the claims set forth in his application for the license. As a means of checking compliance with this requirement, manufacturers would be required to submit a copy of their advertisement to the authorities after it had appeared.

Criticism of other provisions of the regulations which had been expressed by industry representatives at meetings with department officials was effective in bringing about other changes. For example:—

It was proposed originally that manufacturers of the drug products be responsible for seeing to it that their customers filled out the necessary forms and reports to be supplied under the terms of the special license. In its revised form the regulation now provides that the manufacturer needs only to call attention of

—*Continued on page 49*

Chlorine Plant Leasing Offer Dropped by Army

The army has withdrawn the invitation to lease its chlorine production plant at Muscle Shoals, Ala., to private interests and will reoffer the property at a later date under a contract providing for its outright sale if a buyer can be found.

The action, however, is conditioned upon the army getting approval from the congressional committees for sale of the property, which is expected to be sought in the near future. Invitations for leasing the property which had been issued a month ago called for the bids to be opened February 1.

Considerable protests came from the chemical industry when the plan for leasing the plant was announced due to the fact that chlorine is in ample supply. This was brought to the attention of the army by the chlorine producers with a request that the plant either be put in mothballs or sold outright.

The plant was built to meet the requirements of full mobilization. Built by Monsanto Chemical Company, which rejected its option to lease, the plant was completed in June, 1952, and has a capacity to produce 225 tons of chlorine and 250 tons of caustic soda a day.

Boric Acid and Borates Control Set on Exports

Crude and refined boric acid and borates, including borax, have been added to the positive list of products which can be exported from the United States only under validated licenses, except in the case of shipments to Canada. The Bureau of Foreign Commerce, in announcing that the action is effective February 4, said only that controls over exports were being tightened for "security reasons."

The bureau also announced that filing dates for applications to export selenium in the second quarter are March 1 through March 15. The dates apply to powder, metal, salts of organic compounds, salts and compounds including selenium dioxide, and selnium-containing pigments.

Boric Acid Called Safe In Talcum Powder Use

Talcum powders prepared with 5 percent boric acid powder have been found by the Food and Drug Administration to be safe for use, it was announced January 29. Borated talcum powders with 5 percent boric acid have been in use for many years as dusting powders for babies.

FDA said that clinical, animal and chemical research investigation as well as consultation with leading medical authorities who have conducted research in the field of baby talcs confirm their safety.

Soybean Support Price Is $2.22 for 1954 Crop

The Department of Agriculture has announced that the national average support price for 1954-crop soybeans will be $2.22 per bushel. This is equal to 80 percent of the December 15, 1953, parity price for all soybeans.

Price support for the 1953-crop soybeans is at a national average of $2.56 a bushel, reflecting 90 percent of the parity price of September 15, 1952. The level of support for the 1954 crop is designed to keep this year's soybean acreage in approximate balance with production needs without resort to acreage allotments. Restrictive acreage allotments have already been announced, under mandatory provisions of law, for the 1954 crops of wheat, cotton, corn, tobacco, and peanuts. It is believed that many producers may shift large acreages from production of these basic crops to production of soybeans, which will increase the price support obligation, should this occur, the USDA said. This adjustment also brings the level of support for soybeans in line with adjustments previously made for other oilseeds.

Price support for 1954-crop soybeans is announced at this time in accordance with "forward-pricing" provisions of the agricultural act of 1949, in order to assist producers in planning their operations. Price support will be carried out through farm-storage and warehouse-storage loans and through purchase agreements that will be available to producers from time of harvest through January 31, 1955.

The soybeans must have been produced in 1954 by an eligible producer and must grade No. 4 or better and contain not more than 14 percent moisture in order to be eligible for price support.

Cottonseed, Soybean Oils, Lard Trading Limits Off

Commodity Exchange Commission, consisting of the Secretary of Agriculture, the Attorney General and the Secretary of Commerce, last week suspended limits on speculative trading and positions in cottonseed oil, soybean oil, and lard futures. The limits had been in effect since April 1, 1953.

The suspension was recommended by the Commodity Exchange Authority of the Department of Agriculture in the light of changes in patterns of trading and speculative activity in the fats and oils futures markets. Orders of the commission are enforced by the Commodity Exchange Authority.

The commission's orders issued last week provide that the limits, with several amendments, may later be reinstated by the commission on thirty days' notice. No changes were made in the amounts fixed as speculative limits, but amendments provide exemptions from the limits for bona fide cross-hedging in cottonseed oil, soybean oil, and lard futures by dealers, merchandisers, and processors of edible fats and oils. A further amendment, applicable to lard futures, permits the inclusion of the lard yield of hogs owned or purchased in determining the hedgeable interest of packers and processors.

These amendments, recommended by the administrator of the Commodity Exchange Authority, and presiding officer in recent commission hearings, J. M. Mehl, are designed to meet problems peculiar to the hedging use of the fats and oils futures markets, and to inventory accounting and management in the fats and oils industry.

Speculative limits in fats and oils were recommended in hearings before the commission in July, 1952, after investigation and study of fats and oils futures markets in representative periods. After the limits became effective in April, 1953, the CEA recommended that further hearings be held by the commission to consider special problems of fats and oils manufacturers and processors. Such hearings were held in May and July, 1953.

Health Plan Hearings Wed.

The house committee on interstate commerce will begin hearings February 3 on H. R. 7341, the first of a series of bills introduced by chairman Charles Wolverton of New Jersey to carry out the health program recommended by President Eisenhower in his message January 18. Mrs. Oveta Culp Hobby, Secretary of the Department of Health, Education and Welfare, will be the first witness.

Brownell Hails Record Made in Antitrust Field

A look at the record reveals that the Eisenhower administration has lived up to expectations on antitrust law enforcement, Attorney General Herbert Brownell, jr., declared last week.

Speaking at a meeting of the New York State Bar Association's antitrust law section, held January 28 in New York, Mr. Brownell asserted that the antitrust activities of the Department of Justice under the Republicans fully justify a prediction made a little over a year ago that the new administration would be "primarily interested in promoting competition rather than in attacking industry."

Citing the fact that twenty-nine cases—eleven civil and eighteen criminal—have been brought by the department since the Republicans came to power, Mr. Brownell asserted that these suits have aimed "not at mere doctrinal perambulation but at making real strides toward either cracking restraints on market entry or controls over price."

Clear-Cut Violations Cited

Thus, he said, the department has gone after such things as price fixing, allocation of customers or territories and boycotts. "These activities, so clearly at odds with the fundaments of a competitive economy, obviously cannot be tolerated," the Attorney General declared. The department's antitrust course, he continued, also aims at removing threats to competition that may occur in the "producion of goods and services" as well as their distribution.

Mr. Brownell called attention to the fact that "real strides" have been made in speeding up the disposition of cases. "Thus, from May 1, 1953, to January 20, 1954," he stated, "60 percent more cases were terminated than during the corresponding nine months of the previous years. This amounted to forty-two cases:—Twelve by court decision, three by dismissal and twenty-seven by consent judgments and nolo pleas." He also contended that the department has, whenever possible, striven to cut the length of protracted trials.

He alluded to the work of the National Committee to Study the Antitrust Laws, a sixty-man group which he named "to evaluate overall antitrust operation and suggest changes where needed to more effectively secure basic antitrust goals."

—*Continued on page 67*

CCC Debt Limit Measure Gains Passage in House

Legislation to cancel $742,000,000 of indebtedness of the Commodity Credit Corporation to the federal treasury so as to enable the agency to continue its price support operations within its present borrowing ceiling was passed January 27 by the house and sent to the senate.

The bill was approved after officials of the CCC told congressional committees that the agency was within $16,000,000 of its borrowing ceiling and emergency action would have to be taken by congress for it to continue operations. In addition to the stop-gap bill for cancelling the CCC notes to the treasury, they also asked that the ceiling on the agency's borrowing authority be raised $1,750,000,000 to a new limit of $8,500,000,000.

Howard H. Gordon, president of the CCC, testified that the peak in new CCC obligations is expected to come in February when a strong new demand for price bolstering operations is anticipated. Another heavy demand expected in February, 1955, he added, will boost the CCC's commitments close to the $8,000,000,000 mark.

Antibiotic Certification Rules Revisions Announced by FDA

The Food and Drug Administration last week amended its regulations covering certification of antibiotic products with respect to the labeling of sodium penicillin and bacitracin-neomycin with vasoconstrictor.

The amended regulations permit the statement on sodium penicillin labels that "sterile solutions may be stored at room temperature for four weeks without significant loss of potency" and allow bacitracin-neomycin with vasoconstrictor to be labeled with eighteen-months life potency period.

Randall Report Dissenters Give Own Protectionist Policy Recommendations

Taking sharp issue with the basic recommendations of the Randall commission report on foreign trade, Representatives Daniel A. Reed of New York and Richard M. Simpson of Pennsylvania submitted their substitute tariff policy program, calling for increased protection of American industry instead of a lowering of trade barriers.

First chemical industry reaction on the report came during the week from the Synthetic Organic Chemical Manufacturers Association, which said the commission's findings "rejected once and for all time the ivory tower thinking of free trades and exploded the myth of high United States tariff walls."

Meanwhile, Rep. Jacob K. Javits of New York moved to extend the Randall commission's life until January 2, 1955, by introducing H. R. 7479. Mr. Javits indicated that his bill is intended to permit commission participation in the legislation on trade policies that will come before congress later this session. The commission, as the law now stands, is due to expire April 25.

Chief Reed-Simpson Recommendations

Chief recommendations of Rep. Reed, chairman of the house ways and means committee, and Rep. Simpson, a member of the committee, were that the trade agreements act be extended for two years, during which period the Tariff Commission should make a thorough study of the structure of the United States, industry by industry and product line by product line.

From this review, recommendations for a new tariff structure would be submitted to congress as a base for the nation's foreign economic policy. They said that the fundamental principle guiding the review and recommendation should be that of promoting, through tariffs, fair competitive relationships in domestic trade between producers in this country and producers in other countries.

Improved Conditions Abroad

They called attention to the improvement in economic conditions abroad and to the fact that greater restrictions against US trade exist today in foreign countries than ever before. "The time has come," they declared, "for a firmer position by the United States which would contemplate a refusal of aid and concessions, unless conditions looking to sounder and expanding national economies are met. What we need in international relations is a commercial type of bargaining that has been sadly lacking to date."

In citing specific points of disagreement with the majority report, the two congressmen stated that the commission frankly recognizes that its recommendations, if adopted, will adversely affect segments of the domestic economy and cause unemployment and distress. "Is this anything else but a different form of foreign aid, assessed against individual segments

—*Continued on page 48*

DCAT Hears Klumpp On Substitution Perils

Drug "substitution," which instead of waning is on the rise, is a direct threat to all levels of the pharmaceutical industry, Dr. Theodore G. Klumpp, president of Winthrop-Stearns, Inc., New York, declared last week.

Speaking at the mid-winter luncheon meeting of the Drug, Chemical and Allied Trades section of the New York Board of Trade, held January 26 at the Commodore hotel, New York, Dr. Klumpp stated that the drug industry as a whole must recognize that it has a stake in curbing substitution.

This practice, he went on, is not only "an acute economic problem to the manufacturer, but an equally acute ethical and professional problem to the pharmacist." Victims of this practice, he said, are the doctor's patient, who, at best, gets "a product of uncertain quality" and also the "reputable retail pharmacists in the community who may be accused by the public of overcharging for prescriptions honestly compounded."

Key Role of Brand Names

The laws of fair competition prized so highly by the drug industry are built around brand names, Dr. Klumpp asserted, adding that "the brand name gives fair trade its legal basis. To wipe out the brand name structure by substituting generic names is to wipe out the great protection against unfair competition which the retail druggist has worked so hard, for so long, to develop."

Dr. Klumpp cited "duplication" as a second serious drug industry problem. However, he said he saw signs of improvement in the situation. "We manufacturers are beginning to find out," he declared, "that duplicate products have a high mortality and don't often pay off. The isoniazid fiasco of 1952 was one of the worst exhibitions of duplication in our industry. But it did perhaps more than anything else to drive home the economic folly of the practice."

He pledged that drug manufacturers would do all in their power to seek "an equitable solution" of the problem. However, the Winthrop-Stearns president warned, "We will oppose any proposal that would vest in the pharmacist the right to apply the generic name theory in com-

—Continued on page 49

Milwaukee Solvay to Stay With American Natural Gas

The Securities and Exchange Commission decided last week to permit the continued retention of Milwaukee Solvay Coke Company in the American Natural Gas Company System. Milwaukee Solvay is a subsidiary of Milwaukee Gas Light Company, which in turn is a subsidiary of American Natural Gas. It is engaged in the production and sale of coke and coal chemicals. It also produces by-product cokeoven gas which it sells to Milwaukee Gas for resale.

In a decision of December 30, 1947, approving a plan of simplification and integration, the SEC found that Milwaukee Solvay could be retained by American Natural as economically necessary or appropriate to the operations of the integrated system. At the time it was pointed out, however, that once natural gas is available to Milwaukee Gas, the then changed function of Milwaukee Solvay might raise a question whether the gas production of Milwaukee Solvay will be needed and whether its operations will in time become completely disengaged from those of Milwaukee Gas. Accordingly, jurisdiction was reserved to reconsider the question of retainability. In last week's decision, the commission found "no basis" for modifying its earlier conclusions.

Soda Ash Plant for India To Minimize Imports Need

A new soda ash plant that will make India almost independent of outside sources for its soda ash requirements is scheduled to be built this year, according to information reaching the chemical and rubber division of the Business and Defense Services Administration from the American consul at Calcutta.

The plant is to be installed by Rohtas Industries, Ltd., at Dalmianager, managed by Sahu Jain, Ltd., Calcutta, and will have an initial capacity of 120 tons a day, which can be raised to 180 tons later, if necessary, with slight modification. The plant is now being fabricated in West Germany, where it will be inspected shortly by the company's technicians. The consul reported that plans are for production to commerce before the end of this year.

Oldbury Plant Manager

Harry W. Oswald has been appointed plant manager of the new sodium chlorate facility of Oldbury Electro-Chemical Company at Columbus, Miss. Mr. Oswald has been with Oldbury since 1947. The company has also announced that Marshall W. Mead has been appointed production superintendent at the new plant.

American Cyanamid Makes McPherson Dept. Manager

J. D. McPherson has been named manager of American Cyanamid Company's manufacturers chemicals department, it was announced today by R. E. Sumner, general manager of the firm's industrial chemicals division. Mr. McPherson had been technical director and assistant manager of the department.

In 1945, Mr. McPherson joined Cyanamid's engineering department and later was made assistant to the director of purchases in the general purchasing department. He was transferred to the industrial chemicals division in 1952, where he first served as sales supervisor of organic acids and plasticizers.

Soybean Acreage Rise Is Expected This Year

Market analysts of the Department of Agriculture said last week that they look for another increase in the acreage devoted to soybeans in 1954, but warned that if production exceeds 300,000,000 bushels by any considerable amount prices to farmers can be expected to decline to below the support price of $2.22 per bushel.

In the fats and oils situation report made public January 28, the department said that only about 275,000,000 bushels of soybeans will be needed to supply the nearly 3,000,000,000 pounds of oil required for the 1954-55 season.

The department looks for an increase in soybean acreage this year because of the restrictions that are to be applied to acreages of corn, wheat and cotton. This land undoubtedly will be diverted in some measure, it was stated, to the production of soybeans. A further encouragement to diversion, it was added, is the favorable prices that prevail for soybeans, due, however, to the drought last year that reduced soybean output sharply.

Food Fats Stocks High

During the last two crop years, output of food fats was well in excess of requirements and stocks were built up rapidly. Stocks of these fats on October 1, 1953, totaled a record 1,600,000,000 pounds, nearly three times the quantity on hand only two years before, it was stated. The 12 percent reduction in the 1953 soybean crop from the year before, caused by adverse weather, and the reduced lard output, will prevent another large increase

—Continued on page 54

BDSA Names Harold Smith New Chemical Division Chief

Harold Smith, assistant production manager of the western division of Dow Chemical Company, has been named director of the chemical and rubber division by the Business and Defense Services Administration. Mr. Smith as BDSA chemicals chief succeeds Norman E. Hathaway of Davison Chemical Corporation, Baltimore, Md., who completed his six-month tour of duty with the government last week.

Price Index Weaker

The overall OPD price index was slightly weaker, as drops in the heavy chemicals and oils, fats and waxes markets more than outweighed gains in the other sections. Prices for feed grade dicalcium phosphate moved downward among heavy chemicals, while magnesium metal was slightly higher. Coconut, linseed, palm and tung oils eased, as did copra, cottonseed meal and carnauba wax. In this market, gains were recorded for yellow grease, linseed meal, corn and olive oils.

Changes among agricultural chemicals were all upward. This list included dried blood, menhaden meal and tankage. The USP grade eugenol was advanced in the essential oils and aromatic chemicals section, where cardamom, lemongrass and wormseed oils also strengthened. Dalmatian sage and Bourbon vetiver oils were weaker. Kerosene was advanced at gulf ports and the New York harbor. Also included in the changes in petroleum derivatives were diesel and furnace fuel oil.

The protective coatings group was stronger, with advances noted for copal gum, orange, red and Tripoli. USP caffeine was lowered in the drugs and fine chemicals section. There were no other changes in this group. The textile chemicals and coal chemicals markets were without feature. Bourbon, Mexican and Tahitian vanilla beans advanced in the botanical drugs group. Cardamoms and pimento were also stronger in this section. Reductions were effected for Saigon cassia, Indian fennel and sesame seed.

Except for twenty-two changes in botanicals listed on page 53, price changes during the past week were as follows (the number in parentheses after changes indicate the pages on which the market reports will be found):—

Prices Advanced

Butane, indust., grp. 3, ½c. per gal. (36).
Cottonseed meal, 50c. per ton (61).
Dicalcium phosphate, feed grade, $1 per ton (29).
Dried blood, 50c. per unit of ammonia, New York, 25c. Chicago (34).
Eugenol, USP, 5c. per lb. (55).
Grease, yellow, 1c. per lb. (61).
Gum, copal, Manila, CBB, 1c. per lb. (58).
DBB, 1c. per lb.
soft, WS, 3c. per lb.
Philippine, pale chips, 2c. per lb.
nubs, 1c. per lb.
chips, 1c. per lb.
Kerosene, gulf ports, 0.125c. per gal. (36).
N. Y. Harbor, 0.3c. per gal.
Lard, ½c. per lb. (61).
Linseed meal, $1 per ton (61).
Magnesium metal sticks, 1c. per lb. (29).
Menhaden meal, $2 per ton (34).
scrap, $1 per ton.
Oil, cardamom, $3.50 per lb. (55).
Corn, crude, ¼c. per lb. (61).
Lemongrass, 10c. per lb. (55).
Peanut, crude, ¼c. per lb (61).
Rapeseed, ¼c. per lb. (61).
Wormseed, 20c. per lb. (55).
Orange, cardamom lithopone, 2c. per lb. (58).
Petroleum, fuel oil, diesel, N. Y. Harbor, 0.3c. per gal. (36).
furnace, Ark., No. 3, 0.125c. per gal.
N. Y. Harbor, No. 2, 0.3c. per gal.
Group 3, No. 3, 0.125c. per gal.
range, 0.125c. per gal.
Propane, coml., grp. 3, ½c. per gal. (36).
Red, cadmium lithopone, deep shade, 9c. per lb. (58).
light shade, 5c. per lb.
maroon, 10c. per lb.
medium light, 6c. per lb.
orange-red, 2c. per lb.
Tankage, Chicago, 25c. per unit of ammonia (34).
Tripoli, $15 per ton (58).

Prices Reduced

Caffeine, USP, 15c. per lb. (38).
Copra, $5 per ton (61).
Oil, coconut, crude, ¼c. per lb. (61).
Linseed, 0.5c. per lb (61).
Palm, 0.15c. per lb. (61).
Soybean, crude, ¼c. per lb. (61).
Tung, ¼c. per lb. (61).
Sage, Dalmatian, 75c. per lb. (53).
Vetiver, Bourbon, 85c. per lb. (55).
Wax, carnauba, No. 3, Ceara crude, 1c. per lb. (61).
Parnahyba, crude, 1c. per lb.
Yellow, No. 2, Ceara, 1c. per lb.

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

Jan. 29, 1954	Jan. 22, 1954	Jan. 30, 1953
107.35	107.44*	108.62

*Revised.

Tertiary Octylamine Reduced By Rohm & Haas Company

A reduction of 15 cents a pound in the price of tertiary octylamine has been announced by Rohm & Haas Company, Philadelphia. The new price is 54½ cents a pound in truckload quantities, f.o.b. the company's plant at Houston, Tex. The reduction is made possible by process improvements and the increasing consumption, according to Rohm & Haas.

According to a company spokesman, tertiary octylamine is finding wider usage in petroleum products where it gives oil solubility at a cosiderably lower molecular weight than can be obtained with straight chain primary amines. The chemical is one of the company's series of tertiary alkyl, primary aliphatic amines, others of which are sold under the trade name "Primene." Technical literature describing the properties and reactions of tertiary octylamine and the "Primene" amines is available from the manufacturer at Washington Square 5, Philadelphia.

Contents of This Issue

AEC Post Resigned by Williams..... 32
Alox Bought by Surpass Petrochemicals.... 37
American Cyanamid Names McPherson..... 4
Antibiotic Certification Rules Revised..... 3
Antibiotics Sought by Israel..... 45
APhA Meets Aug. 22..... 7
APMA Western Meeting Feb. 15..... 7

BDSA Names Smith Chemicals Chief..... 4
BDSA Post to Pothen..... 27
Bio-Ramo Post to Two..... 45
Borden Award Going to Josephson..... 51
Boric Acid & Borates Controls Set..... 3
Boric Acid Use in Talcum Powder Safe.... 3
Boyer, Collins Elevated by Esso..... 31
Brownell Hails Antitrust Record..... 3
Buffalo PVLA Plans Ladies' Night..... 54

Catforming Unit Goes on Stream..... 57
CCC Debt Measure Passed in House..... 3
Chlorine Plant Leasing Offer Dropped..... 3
Conn. Chemical Research Building..... 51
Consulting Chemists Offer Reprints..... 44
Consulting Chemists Rename Officials..... 7
Copra Up from Malaya..... 54
CSC's Alcohol Position Strengthened..... 45
Cyanamid Names Bound Brook Plant Mgrs. 40

DCAT Hears Klumpp..... 4
Dexter Adds Nonionic Dyeing Aids..... 31
Diamond Appoints Combs..... 33

Emulsol Appoints Stone Co..... 33
Esso Labs Appoints Two..... 51
Esso Pres. Sees '54 Business Good..... 5

FDA Head Describes Budget Cut Effects.... 5
Fisher Starts Chemical Facility in N. J..... 45

Gen'l Mills Names Weber..... 56
Glidden Naval Stores Unit Expands..... 37
GSA Announces Strategic Materials Data.. 32

Health Plan Hearings Wed..... 3
Hercules Reports '53 Income Gain..... 31
HEW Post to Foristel..... 51
HIF Releases Medical Study Data..... 49
Hooker Chlorine Institute President..... 7
Hurst Executive Here in April..... 32

Independent Oil Elects Cullen..... 47

Koppers Plans Polyethylene Production.... 5
Koppers to Furnish Styrene Services..... 5

Lobel Chemical Formed..... 31
Lubrizol Plant Opened..... 35

Mallinckrodt Elects Directors..... 45
McKesson & Robbins Names Doerr..... 67
Milwaukee Solvay Retention to Hold..... 4

NACA Weighs Pesticides at Parley..... 7
Nat'l Science Foundation Adds Grants..... 47
Nitroparaffins Expansion Projected..... 5
NY Paint Club Told of Foreign Tie..... 37
N.Y. Paint Technicians Meet Feb. 4..... 66
Nuodex Creates Dept..... 33

Oilseeds Output, Planting, Up in Burma.... 60
Olive Oil Offered by USDA..... 57
Osborn Names Agent..... 37
Oswald Oldbury Plant Manager..... 4

PA's Eye View..... 5
Pest Control Ass'n Post to Spear..... 7
Pettinga Lilly Biochemicals Executive..... 45
Phthalate, Adipate Added to Cabot Line.... 5
Pioneer Chemical Names Hall Pres..... 54

Randall Report Dissent Stated..... 3
Roblin Cyanamid Appointee..... 60

Soap Association Hears Glycerin Adequate.. 7
Soda Ash Plant Planned for India..... 4
Soybean Acreage Rise Expected..... 4
Soybeans '54 Support Price Set..... 3
Stauffer Moves N. Y. Headquarters..... 32
Stauffer Operating Louisville Plant..... 5
Synthetic Fibers Price Cut by duPont..... 60
Synthetic Rubber Planned by duPont..... 5

Tertiary Octylamine Cut by Rohm & Haas.. 4

United Fertilizer New Firm Name..... 35

Vegetable Oils, Fats Trading Limits Off..... 3
Veterinary Drugs Drops Plan..... 3
Vitro Opens in Washington..... 60

Walker Adds Fermentation Unit..... 45
West N. Y. Paint Technicians Meet..... 37
Wyandotte Appoints Healy..... 33

Market Reports

(See Page 9)

General Features

Advertisers Index..... 67
Association Meeting Dates..... 7
Bids Wanted..... 57
Book Review..... 28
Classified Advertisements..... 66
Consulting Chemists and Engineers..... 37
Coal Chemicals Output..... 38
Crude Oil Stocks..... 36
Current Market Quotations..... 9
Editorials..... 28
Imports..... 50
Imports Detained..... 53
Obituaries..... 50
OPD Price Index..... 4
Washington Talks It Over..... 5
Trade Briefs..... 45, 47, 60

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Esso President Sees Business Good in '54

Business "will not do badly in 1954," Stanley C. Hope, president of Esso Standard Oil Company, New York, predicted last week during the opening session of the American Management Association's national marketing conference, held in the Roosevelt hotel, New York.

Although economists are by no means unanimous, the weight of their opinion seems to be, Mr. Hope said, that this year industrial activity as reflected in the Federal Reserve Board index will be about 10 percent below that of 1953 and that the gross national product will decline about 5 percent. However, he pointed out, "it does not seem to be expected by anyone that the business decline will be a general across-the-board setback. Leaders in different industries have expressed confidence that their business will actually improve this year and heads of individual companies are by no means willing to accept a decline in volume done by their industry as necessarily meaning a decline in the output of their companies."

Personal Savings High

There are many factors on the positive side of the picture, Mr. Hope said. "Never in our history have personal savings been greater, and I see no indication that the needs and wants of people have been satisfied or will be satisfied in the near future."

Consumers have money, Mr. Hope said, and they will spent it. Recession psychology "does not seem to have much effect upon the consumer as long as he wants things and is able to buy them." Dire predictions, he pointed out, proved wrong just after World War II and again in the spring of 1952. "I am inclined to believe," he said, "that the impact of such talk upon the consumer can be greatly overrated."

However, he added, the consumers now have many choices of how and where and for what they will spend their money. "We are already," he declared, "in one of the most competitive periods American business has known." Productive capacity has grown faster than demand, and great

—Continued on page 27

Phthalate, Adipate Added To Godfrey L. Cabot Line

The plastics chemicals division of Godfrey L. Cabot, Inc., Boston, has announced commercial production of a new phthalate and a new adipate—"Cabflex ODP" (iso-octyl-decyl phthalate) and "Cabflex ODA" (iso-octyl-decyl adipate). Newest in the "Cabflex" line of plasticizers, "Cabflex ODP" and "Cabflex ODA" are priced no higher than the octyl esters, yet are lower in volatility and are said to offer improved flexibility permanence in vinyl compounds. They are manufactured from raw materials synthetically produced specifically for the production of esters.

The addition of "Cabflex ODP" and "Cabflex ODA" increases the "Cabflex" range of plasticizers for vinyl compounds to ten, including four phthalates, four adipates, an azelate and a hydrocarbon oil plasticizer.

P.A.'s-Eye View of Business

Composite view, January 31, of purchasing agents composing the Business Survey Committee of the National Association of Purchasing Agents.

January industrial business started very slowly and picked up a little momentum toward the end of the month. Production and orders both declined, but at a slower pace than in December. Price weakness continued to spread—but with no sharp general declines. Selling efforts are being strongly pushed. The reduction of unworked material inventories continued. Employment was lower, though cutbacks have generally not been deep. Buying policy is trending into the short side of the "hand-to-mouth to 60-day" columns. Credit conditions are generally reported good, but are being closely watched.

Purchasing executives, though extremely cautious, are not pessimistic; they find the transition into a buyers' market so far has been orderly. The majority believes that a leveling off may come this quarter, with a possible upward trend.

Commodity Prices

The price structure of industrial purchased materials shows further weakness in January—nothing drastic—and there is no evidence of liquidation or panic selling. Apparently, the majority of price adjustments was the result of sellers' appraisal of the market testing which has been going on the past few months, the changes in supply and demand, and the keen competition for volume business. It is believed those conditions will continue.

Inventories

Unworked material inventories continued the considerable decline reported in the December survey. Balancing stocks with lower production schedules is the objective. Price weakness, ready availability, and shorter production lead time of suppliers encourage the cautious inventory policy being generally pursued. Turnover rates for materials purchased are improving—and are reported much faster than a year ago.

Employment

Lower pay rolls are reported by 47 per cent of the survey members in January. Overall, the cutbacks have not been steep. Many report a weeding out of the least efficient and failure to replace the normal quits. The average work week is probably forty hours and under, and some multiple shifts are being reduced. The weather has had some effect on employment. Productivity is rising. Skilled help is now reported available in several areas. More applicants for white collar jobs are also reported.

Buying Policy

Buying coverage has moved a little closer to the "hand-to-mouth to 60-days" range. 84 percent report holding commitments for the principal materials purchased to these limits. The slight trend to the 90-day bracket recorded for December was reversed in January. Lack of confidence in prices, shortened scheduling of orders, and inventory reductions are the principal reasons for these close buying practices.

Specific Commodity Changes

The price trend continued down in January, with many more small price reductions reported. On the up side were:—Metal containers, multiwall bags, chlorine, meat, coffee, cocoa, magnesium, essential oils, silicon, soap, tallow, small valves. Reported down were:— Alcohol, secondary

—Continued on page 66

Synthetic Rubber Facility Planned by duPont in Mich.

Preliminary plans for a new plant to manufacture "Neoprene" synthetic rubber at Montague, Mich., have been announced by E. I. duPont de Nemours & Co., Wilmington, Del. A site of about 1,000 acres has been optioned there. It adjoins the site on which Hooker Electrochemical Company is now building a chlorine plant and another location on which Union Carbide & Carbon Corporation will build. DuPont and Union Carbide obtained the options from Hooker, which had previously optioned the land in accordance with a long-range development program. The Hooker and Union Carbide plants will supply anhydrous hydrogen chloride and acetylene to duPont for "Neoprene" manufacture.

DuPont's output of "Neoprene" now comes from its Louisville, Ky., plant, where an expansion project is currently under way. Recent additions to these facilities have proved adequate for existing needs, and the present expansion will meet the growing demand for "Neoprene" until the new plant is completed, it was said.

The company is conducting engineering asd economic studies which will require several months for completion and which must be finished before plans can be firmly set. Tentatively, the company expects to be ready to start construction late in 1954 and get it into partial operation by early 1956.

Hooker is completing a chlorine plant and will manufacture anhydrous hydrogen chloride for duPont, delivering it by pipeline. The contemplated plant of Union Carbide will generate acetylene, the other major raw material for "Neoprene," and pipe it into the duPont plant. The plant area is over a huge deposit of salt from which the chlorine will be made.

Nitroparaffins Expansion Project Revealed by CSC

Commercial Solvents Corporation will build large scale facilities at Sterlington, La., for the production of nitroparaffins, it was announced last week by J. Albert Woods, president, following approval of the project by the board of directors.

In addition to the new construction at Sterlington, the company's existing nitroparaffins operation at Peoria, Ill., will be enlarged. The cost of the expansion, estimated at $5,000,000, will be financed from current funds. Plant design and engineering is being handled by the company's research, development and engineering division. Full scale production is scheduled for the last quarter of 1955.

The basic nitroparaffine products are nitromethane, nitroethane, 1-nitropropane, 2-nitropropane, and nitrobutnane. The derivatives include the aminohydroxy compounds and the hydroxylamine salts. The patented processes on which the project is based were developed in the CSC research laboratories from initial research carried out by the Purdue Reseach Foundation. The nitroparaffins have been under study by CSC since 1935.

Stauffer Starts Operations At New Plant in Louisville

Stauffer Chemical Company has started operations at its new $3,500,000 plant in Louisville, Ky., it has been announced by Hans Stauffer, executive vice-president.

The plant, located on a ninety-acre tract one mile outside the city limits, with Ohio River frontage, was built for the production of perchloroethylene, carbon tetrachloride and hydrogen chloride in tank car quantities. Stauffer owns an adjoining ninety acres of land for expansion, which is expected within two years. Basic raw material for production will be hydrocarbon products. Stauffer will supply hydrogen chloride to local consumers and will distribute perchloroethylene and carbon tetrachloride to consuming centers.

H. L. McLean, formerly manager of Stauffer's Niagara Falls, N. Y., plant, is manager of the new facilities. Before joining Stauffer, Mr. McLean was a superintendent for Westvaco Chemical Division of Food Machinery & Chemical Corporation.

FDA Head Points Out Effects of Budget Cuts

Effects of the decrease in manpower and the increase in workload of the Food and Drug Administration were cited in a paper prepared by Charles W. Crawford, Commissioner of Food and Drugs of the Department of Health, Education and Welfare, for presentation in New York last week before the food, drug and cosmetic law section of the New York State Bar Association. The paper was read by Charles Herrmann, chief of the New York district of the FDA.

"Our 1954 budget appropriation was cut about 8 percent from the President's budget recommendation, which had provided for the continuation of enforcement activities at the 1953 level. This meant abolition of many important jobs in Washington and district offices. On July 1, 1953, our enforcement staff numbered 862; today it is 797," Commissioner Crawford's message stated.

'Cannot Slacken Activities'

"To meet this situation with the least possible risk to consumer welfare, we cannot slacken our activities in protection of health. This precludes any significant cutback on our drug work, even in misbranding cases, for drugs misrepresented for serious disease conditions can cause serious harm. Our cosmetic work has been mainly confined to potentially injurious items. This leaves a reduction in work on foods as our only alternative.

"In the food field, we can make no cutback on products contaminated with poisonous substances.

"So little work on economic violations was done in fiscal 1953 that even drastic curtailment will not meet the deficit. The whole food standards program will lose ground, both in the formulation of new standards, which requires a substantial amount of field study, and in enforcement of standards already on the books. Sufficient savings to cover the deficit can be made only by reducing work on sanitation and on filthy and decomposed foods," Commissioner Crawford's paper stated.

Factory Inspections Cut 3 Percent

"Food factory inspections were cut 3 percent below those of fiscal 1952, mainly due to the smaller number of available inspectors rather than to refusals to permit inspection after the December, 1952, supreme court decision. While the number of refusals was substantial, the percentage of the total was small," it was pointed out in Mr. Crawford's message.

Reviewing the fifteen-year history of the food, drug and cosmetic act, Vincent A. Kleinfeld, former food and drug at-

—Continued on page 66

Koppers to Furnish Services For Styrene Plant in France

Koppers Company, Pittsburgh, Pa., has received a contract to supply "know-how," furnish engineering services and field assistance in the building and operation of a new styrene monomer plant in France, the first of its kind in that country.

B. J. C. van der Hoeven, vice-president and assistant general manager of the Koppers chemical division, said the plant is to be erected at Mazingarbe for the Societe Houilleres-Pechiney-Progil, a chemical corporation owned by Houilleres du Nord et du Pas-de-Calais, a nationalized firm which operates extensive coal, coke and chemical faciilties, and by Pechiney and La Societe Progil, companies now producing chemicals in France.

Two of Koppers divisions will participate in the contract, the engineering and construction division furnishing assistance in engineering and field work, while the chemical division will provide the "know-how." Construction of the French plant is expected to take at least two years. It will have a rated capacity of from 10,000 to 14,000 metric tons per year. Koppers also will assist the French firm in putting the plant into operation. Actual construction of the plant will be by the French chemical firm, with engineering to be done by a Belgian firm.

Polyethylene Production Is Slated by Koppers Co.

Koppers Company, Pittsburgh, Pa., last week announced plans for the production of polyethylene. Under consideration are several plant sites, including Port Arthur, Tex., where Koppers already has a plant for the production of chemicals which went into full operation less than a year ago. Actual construction of the new unit is slated to begin this spring, with initial operations scheduled for the middle of 1955.

Washington Talks It Over

By Ralph L. Cherry

President Eisenhower is in the unenviable position of having to find a leader in congress who can carry the ball for the Administration on the up-coming tariff issue. At the present writing, there is no one in sight for this job, and by force of circumstances it may be the Democrats who will fall heir to it.

The tariff committee chairmen of the house and senate—Rep. Reed of the ways and means committee and Sen. Millikin of the finance committee—eliminated themselves from the task by their vigorous dissents from the recommendations of the Randall Commission. Speaker Joe Martin and Majority Leader Halleck in the house are only lukewarm for the Randall Commission report at best.

There is the possibility, however, that the Randall Commission report is not the last word on the subject and doesn't reflect the President's views on trade policy. He is having the report studied and analyzed by the several departments concerned with trade and what they say will have a big influence on his recommendations, which he plans to send to congress shortly.

However, there is no denying the probability—not possibility—that Mr. Eisenhower will take a much more liberal attitude on trade policies than did the congressional dissenters from the Randall Commission report and will recommend some lowering of excessive tariff barriers. A significant indication of this was Mr. Eisenhower's retention of Chairman Randall on his staff as trade consultant after the commission had completed its work.

Crop Support a Big Job

Some measure of the magnitude of the task which faced the Commodity Credit Corporation in supporting the prices of the 1953 crops, just in the oils fields alone, is given in the latest fats and oils situation report of the Department of Agriculture. That report shows that:—

As of December 15, 11 percent of the soybean crop was under loan to the government; 40 percent of the flaxseed crop was similarly located; 12 percent of the cottonseed oil crush; and through January 8 farmers had placed 24 percent of the peanut crop under support programs.

The situation is not hopeless as it might seem, however. Prices of soybeans have risen substantially since December 15 probably all beans under loan will be redeemed; there is a probability that commercial stocks of flaxseed might be inade-

—Continued on page 28

Vulcanization Accelerators

In the manufacture of thiuram sulfide type of accelerators as well as dimethyldithiocarbamic acid metal salts.

Fungicides & Insecticides

In the manufacture of the zinc and iron salts of dimethyldithiocarbamic acid which is used in the form of its zinc and iron salts as agricultural fungicides.

In making the new systemic insecticides, such as octomethyl-pyrophosphoramide.

Fuel

Internal coolant to improve the performance of reciprocating engines.

Dyes, Drugs, Pharmaceuticals

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In the manufacture of anti-malarials and long-chain quaternary ammonium compounds.

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Textiles

To improve affinity of cellulose acetate rayon for direct cotton dyes.

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Catalysts & Accelerators

As catalysts where alkaline conditions are required for polymerization.

Polymerization Inhibitor

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Used as a stabilizer for certain types of resins.

Used to reduce webbing of natural and synthetic rubber latexes during dipping operations.

Surface-active agents

In the manufacture of amide and sulfonated amide-type detergents and surface-active agents.

Leather

For use in unhairing hides.

Other Uses

In the manufacture of photographic chemicals, fire explosive terry, amide-type plasticizers, and ion-exchange resins.

Useful as activators for paint and varnish removers based on chlorinated hydrocarbons.

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Association Meetings

This Week

American Pharmaceutical Manufacturers Association, eastern section meetings, Roosevelt hotel, New York, February 1-3.

American Society for Testing Materials, committee week, Shoreham hotel, Washington, D. C., February 1-5.

Eastern Pest Control Operators Conference, University of Massachusetts, Amherst, Mass., February 4-6.

Philadelphia Drug Exchange, annual banquet, Down Town Club, Philadelphia, February 4.

Southern Pest Control Operators Conference, Louisiana State University, Baton Rouge, La., February 1-3.

Air Pollution Control Association, annual meeting, Patten hotel, Chattanooga, Tenn., May 3-5.

American Chemical Society, Chicago section, national chemical exposition, Chicago Coliseum, October 12-15.

American Drug Manufacturers Association, annual meeting, June 28-30, Lake Placid, N. Y.

American Institute of Chemical Engineers, annual meeting, New Yorker hotel, New York, December 12-15, 1954.

American Management Association, personnel conference, Palmer House, Chicago, February 15-17; national packaging exposition, Convention Hall, Atlantic City, N. J., April 5-8.

American Oil Chemists' Society, annual meeting, Plaza hotel, San Antonio, Tex., April 12-14.

American Petroleum Institute, Conrad Hilton hotel and Palmer House, Chicago, November 8-11.

American Pharmaceutical Association, Statler hotel, Boston, August 22-27.

American Pharmaceutical Manufacturers Association, central section meetings. Edgewater Beach hotel, Chicago, February 8-10; western section meetings, Ambassador hotel, Los Angeles, Calif., February 15-16; annual meeting, Boca Raton Club, Boca Raton, Fla., March 29-31.

American Plant Food Council, annual meeting, Homestead, Hot Springs, Va., June 10-13.

American Society for Testing Materials, annual meeting, Sherman and Morrison hotels, Chicago, June 13-18.

American Soybean Association, annual convention, Memphis, Tenn., August 30-September 1.

American Water Works Association, annual conference, Seattle, Wash., May 23-28.

Association of Consulting Chemists and Chemical Engineers, symposium and banquet, Belmont Plaza hotel, New York, April 27; annual meeting, symposium, October 26.

Basic Materials Exposition, International Amphitheatre, Chicago, May 17-20.

Chemical Institute of Canada, protective coatings division conference, Toronto and Montreal, February 25-26; annual conference and exhibition, Royal York hotel, Toronto, June 21-23.

Chemical Market Research Association, Niagara hotel, Niagara Falls, N. Y., February 25.

Chemical Specialties Manufacturers Association, mid-year meeting, Netherlands Plaza hotel, Cincinnati, Ohio, May 23-25; annual meeting, New Yorker hotel, New York, December 5-7.

Commercial Chemical Development Association, annual open meeting, Statler hotel, New York, March 17-18.

Drug Chemical and Allied Trades section of the New York Board of Trade, annual dinner, Waldorf-Astoria hotel, New York, March 4.

Federal Wholesale Druggists' Association, mid-year meeting, Statler hotel, New York, February 25-27; annual convention, Greenbrier hotel, White Sulphur Springs, W. Va., September 19-22.

Federation of Paint and Varnish Production Clubs, annual meeting, Palmer House, Chicago, November 18-20.

Flavoring Extract Manufacturers' Association, annual convention, Biltmore hotel, New York,, May 16-19.

Forest Products Research Society, national meeting, Grand Rapids, Mich., May 5-7.

Industrial Research Institute, award dinner, San Francisco, April 22.

Manufacturing Chemists Association, annual meeting and joint outing with SOCMA, Greenbrier hotel, White Sulphur Springs, W. Va., June 3-5.

Metal Powder Association, annual meeting and show, Drake hotel, Chicago, April 26-28.

National Agricultural Chemicals Association, spring meeting, Shamrock hotel, Houston, Tex., March 24-26.

National Chemical Exposition, Chicago Coliseum, Chicago, October 12-15.

National Cottonseed Products Association, annual meeting, Shamrock hotel, Houston, Tex., May 7-11.

National Farm Chemurgic Council, annual chemurgic conference, Peabody hotel, Memphis, Tenn., April 5-7.

National Foreign Trade Council, annual convention, Waldorf-Astoria hotel, New York, November 15-17.

National Paint, Varnish and Lacquer Association, annual meeting, Palmer House, Chicago, November 15-17.

Packaging Institute, forum, Roosevelt hotel, New York, October 25-27.

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, William Penn hotel, Pittsburgh, Pa., March 1-5.

Plant Maintenance Show, Pan Pacific Auditorium, Los Angeles, July 13-15.

Southern Industrial Wastes Conference, Shamrock hotel, Houston, Tex., April 21-23.

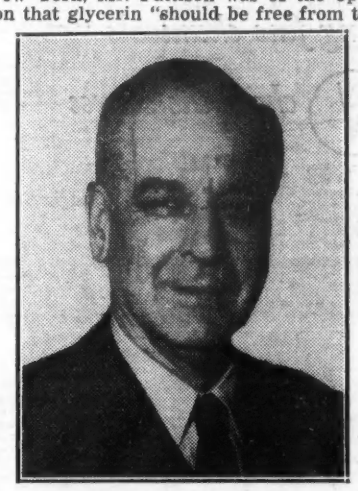
Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Commodore hotel, New York, February 10; joint outing with MCA, Greenbrier hotel, White Sulphur Springs, W. Va., June 3-5.

Toilet Goods Association, annual meeting, Waldorf-Astoria hotel, New York, May 11-13.

Soap Ass'n Told Glycerin Supply Certain to Meet All '54 Demands

Glycerin supply seems a safe bet to meet all demands of the US economy this year, E. Scott Pattison, manager of the glycerin division of the Association of American Soap & Glycerin Producers, declared last week.

Reporting to the association's twenty-seventh annual convention, held January 26 to 28 at the Waldorf-Actoria hotel, New York, Mr. Pattison was of the opinion that glycerin "should be free from the 'feast or famine' effects that have driven consumers to seek substitutes in the past, or to anticipate indigestible market glut."



Charles S. Campbell
Elected President

Noting that 1953 domestic output of crude and synthetic glycerin is likely to run (on a 100 percent basis) to about 218,000,000 pounds—some 30,000,000 pounds above 1952—he called attention to the fact that this gain was made in the face of falling soap production.

This, he contended, was due to two factors—(1) use of better grade fats in soap making and a proportionate increase, relative to total pounds of soap produced, of higher grades where glycerin yields are at a maximum, and (2) greater production of glycerin as a co-product of fatty acids and fatty alcohols. On top of this, he added, net imports last year were appreciably higher.

Touching on the glycerin end-use picture, Mr. Pattison said that the association made a survey in 1950 which "indicated that at least one-third of all glycerin went to the alkyd resin and protective coatings industry. This proportion is probably equally true today. Other markets for glycerin, particularly cellophane, tobacco, drugs and toiletries, have been relatively stable since 1950. One field of growing importance has been that of monoglyceride emulsifiers for margarine and shortening, and for other food and industrial uses.

Glycerin Use in Explosives

"Glycerin in explosives is perhaps declining with the increased use of certain other polyols and in military explosives with defense curtailment. Basically, we have about 60 percent of all glycerin moving out in thousands of different directions to small and relatively stable markets, all growing along with a general industrial and population growth. Then, we have about 40 percent representing alkyd resins and other chemical uses in which the swings with business conditions are relatively great."

Dr. Eugene McCauliff of Glyco Products Company, Brooklyn, N. Y., alluded to the recent ban placed on fatty acid-derived bread emulsifiers by the Food and Drug Administration. He expressed the fear that a similar action by the agency would bar them also from the smaller, but still very important, ice cream market.

Fats as Plasticizers

Despite the fact that they have been relegated to a minor role in the plastics field in the past, fats have a "bright" future as plasticizing materials, Dr. Daniel Swern of the Department of Agriculture's Eastern Regional Research Laboratory stated. Pointing out that the synthetic plastics industry consumes some 3,000,000,000 pounds of chemicals every year, Dr. Swern saw in plastics an outlet of "huge actual and potential tonnage" for plasticizers.

He noted that in the past fats were largely used as secondary plasticizers, serving, for example, to provide hand and drape to vinyl sheeting, as lubricants in milling to cut down milling temperatures and, where the price was right, as diluents for the more expensive plasticizers. Ricinoleates, he went on to say, are the best known of these secondary plasticizers derivable from fats.

"About three years ago a new class of fatty plasticizer for polyvinyl chloride was put on the market and its consumption has grown rapidly," Dr. Swern reported. "This plasticizer was epoxidized soybean oil, and recently epoxidized butyl oleate and hexyl oleate became commercially available. For the first time, compounds derived directly from fats show promise as primary plasticizers for polyvinyl chloride, and can compete with dioctyl phthalate and other plasticizers price-wise and performance-wise."

Competition to Glycerin in Cosmetics

The question of "whether other polyhydric compounds such as sorbitol and propyleneglycol will grow to cloud size and threaten to rain out the entire use of glycerin" in cosmetics rests largely in the hands of glycerin producers, Dr. E. G. McDonough of Evans Research & Development Corporation, New York, asserted. The key factor in preventing this from happening, he said, "is an assured stable market of glycerin brought about by a competitive price and easy availability."

Dr. McDonough saw two major influences on the glycerin market. "Large new uses for tallow in animal feeds will probably increase," he predicted, adding that this would probably "drive tallow prices out of the reach of the export market." In this connection, he noted that world output of glycerin is not increased by the export market and that feed uses result in a complete loss of glycerin since, in the latter case, the "tallow is burned by the animal and not added to his recoverable body fat."

"The other and perhaps greatest stabilizing influence on the glycerin market," he contended, "is the production of a synthetic glycerin. It would seem that the cost of production of this synthetic material would be sufficiently low so that glycerin could be sold at price levels that would be competitive to other polyhydric alcohols with which glycerin has shared most of its end-uses."

Soap Fats Outlook Good

The outlook for soap fats in 1954 was summed up by George Prichard of the Bureau of Raw Materials as one of "continuing plenty." Mr. Prichard expected the United States to continue as a large net exporter of all fats and oils, particularly tallow and grease, unless we run into a spell of unfavorable weather.

"Any decrease in total US production which may be brought about by government restrictions on cotton acreage may be offset by increased production of soybeans," he stated. "Expansion is also likely for flaxseed which is to be supported in 1954 at 70 percent of parity and for castor beans for which the Commodity Credit Corporation will guarantee a minimum price of 6c. per pound, out-of-hull basis, delivered to approved warehouses.

"Total world production of fats and

—Continued on page 48

Chlorine Institute President

R. Wolcott Hooker, vice-president of Hooker Electrochemical Company, Niagara Falls, N.Y., has been re-elected president of the Chlorine Institute for the sixth consecutive term. Louis Neuberg, vice-president of Westvaco Chlor-Alkali Division of Food Machinery & Chemical Corporation, has been re-elected vice-president and Robert T. Baldwin has been re-elected secretary-treasurer.

APMA Western Section Meetings Open Feb. 15

The American Pharmaceutical Manufacturers' Association has announced the program for the western section meetings, which will be held February 15 and 16 at the Ambassador hotel, Los Angeles.

Opening remarks at the February 15 session will be made by Jack Schopflin, of E. S. Miller Laboratories, chairman of the western section. At the scientific section, Dr. Thomas H. Jukes, of Lederle Laboratories, will speak on "Some Recent Advances in the Knowledge of the Vitamins," followed by an address by Dr. R. T. Stormont, secretary of the council on pharmacy and chemistry of the American Medical Association.

U.C.L.A. Dean on Program

The medical session will come next, with Dr. Stafford Warren, dean of the School of Medicine and director of the atomic energy project at the University of California at Los Angeles, speaking on "Development of the New School of Medicine, U.C.L.A." This will be followed by a luncheon at which Frederick H. Hines, vice-president of Douglas Aircraft Company, will be the principal speaker. There will be a talk by Michael F. Charley, president of APMA. Dr. Robert A. Peterman, medical director of J. B. Roerig & Co., a subsidiary of Chas. Pfizer & Co., will speak on "The Growing Role of Clinical Nutrition in Medicine."

The production session will feature two papers:—"Plant Inspection," by R. W. Jennings, of the Food and Drug Administration, and "New Plastic Materials for the Pharmaceutical Industry," J. R. Akers, of Bakelite Company, a division of Union Carbide & Carbon Corporation.

Production Section Continues

On February 16 the production session will continue with Carl Boswell, president of C. M. Boswell & Associates, speaking on "Statistical Quality Control in Production," and Clifford Smart, of Austin Company, talking on "The Pharmaceutical Building."

The marketing session will open with an address by Robert J. Lyon, assistant to

—Continued on page 51

NACA to Weigh Pesticide Problems at March Parley

Problems of distribution, sale and use of pesticides will be the theme at the spring meeting of the National Agricultural Chemcial Association, to be held March 24 through 26 at the Shamrock hotel, Houston, Tex.

The president of the association, Paul Mayfield, will open the first day's events with an address at 10 a.m. Mr. Mayfield is general manager of the naval stores department of Hercules Powder Company, Wilmington, Del. Presiding officers will be Mr. Mayfield and NACA vice-president W. W. Allen, for Dow Chemical Company, Midland, Mich.

Commissioner of Agriculture John C. White, of the Texas State Department of Agriculture, has accepted an invitation to address the group the first day. Dr. R. D. Lewis, director of the Texas Agricultural Experiment Station, will review some of the research and development of chemicals for agriculture in the southwest. He

—Continued on page 35

Pest Control Association Technical Post to Spear

The National Pest Control Association has appointed Dr. Philip J. Spear technical director to fill the vacancy created by the recent promotion of Dr. Ralph E. Heal to the position of executive secretary.

Before joining the association, Dr. Spear spent more than five years in structural pest control work in Calfornia and one year in insecticide sales and service for the Niagara Sprayer & Chemical Company in New England. He also did research work for American Aerovap and later directed the Aerovap research laboratories.

Consulting Chemists Rename Secretary, Publicity Director

The Association of Consulting Chemists and Chemical Engineers has reappointed Robert T. Baldwin as executive secretary and assistant treasurer, and A. B. Bowers as director of publicity and assistant executive secretary. Both were reappointed for the twenty-sixth time.

APhA Meets August 22

The American Pharmaceutical Association will hold its annual meeting in the Statler hotel, Boston, August 22.

when using fine chemicals

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As a major supplier of fine, dependable chemicals to the pharmaceutical manufacturer, Mallinckrodt has long had an enviable reputation. This was earned not only with standard chemicals, but with chemicals and intermediates made *to specification* for the greatest names in the pharmaceutical field. Mallinckrodt's chemists often work in cooperation with pharmaceutical houses to create exactly the right chemical, with the right properties—and to get the job done at the right time. This is good to remember the next time you set out to develop a new product. Write us if you have questions or a problem.

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Current Market Quotations

Chemicals and Related Materials

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Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, January 29 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views.

Index to Reports on Price Changes and Other Market Aspects

Acids	29	Drugs	43	Gums	53	Paint Materials	58
Agricultural Chemicals	34	Essential Oils	55	Heavy Chemicals	29	Pesticides	34
Aromatic Chemicals	55	Fats and Greases	61	Lacquer Materials	58	Petroleum Derivatives	36
Botanical Drugs	53	Fertilizer Materials	34	Leather Chemicals	41	Oil, Cake and Meal	61
Coal Chemicals	38	Fine Chemicals	43	Naval Stores	58	Oils	61

Protective Coatings Materials	58	Waxes	61
Spices	53		
Textile Chemicals	41		
Varnish Materials	58		

A

Acacia (see Gum arabic).

Acenaphthene below 92.5 C., m.p., dms. works lb. .40 - —
above 92.5 C., m.p., bbls., dms., works lb. .41 - .50

Acetaldehyde, 99% dms., c.l., frt. equald lb. .1250- .1435
l.c.l., frt. equald lb. .1350- .1535
tanks, frt. equald lb. .1050- .1300

Acetaldol (see Aldol).

Acetanilide tech., bbls., c.l., dlvd lb. .29 - —
ton lots lb. .30 - —
smaller lots lb. .30½- —
USP, bbls., 2,000-lb. lots lb. .80 - —
smaller lots lb. .81 - .86

Acetic anhydride, dms., c.l., dlvd. E. lb. .15½- —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .14 - —

Acetoacetanilide, fib. dms., c.l., dlvd. lb. .75 - —
l.c.l., dlvd. lb. .76 - —

Acetoacet-o-chloroanilide, fib., dms., c.l., dlvd lb. 1.27 - —
l.c.l., dlvd. lb. 1.28 - —

Acetoacet-o-toluidide, fib., dms., c.l., dlvd lb. .78 - —
l.c.l. dlvd lb. .79 - —

Acetone, CP, dms., c.l., dlvd lb. .10¼- —
l.c.l., dlvd lb. .11½- —
tanks, dlvd. lb. .08½- —

Methyl (see M)

Acetonitrile, dms. c.l. works lb. .45 - —
l.c.l., works lb. .47 - —

Acetophenetidin USP bbls., works, frt. equald lb. 1.15 - 1.17
Acetophenone cns., dms. lb. 1.21 - 1.85
tech. dms., l.c.l., works lb. .75 - —

N-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 - 1.85

Acetyltributyl citrate, tech., dms., c.l lb. .33½- —
l.c.l lb. .38½- —
tanks lb. .32 - —

Acetyltriethyl citrate tech., dms., c.l lb. .37½- —
l.c.l. lb. .38½- —
tanks lb. .36 - —

Acid, abietic, com'l., dms., c.l., works lb. .12 - —
l.c.l., works lb. .1490- —
cryst., dms., c.l., works lb. .06½- —
l.c.l., works lb. .07 - .07½

Acetic, com'l or redist., 28%, bbls 100 lbs 5.50 - —
56%, bbls 100 lbs. 9.65 - —
70%, bbls 100 lbs.11.70 - —
80%, bbls 100 lbs.12.45 - —

glacial, synthetic, CP, dms., works 100 lbs.15.00 -16.00
tech., dms., c.l., works or dlvd 100 lbs.10.50 12.00
l.c.l., same basis 100 lbs.11.00 -13.00
tanks, works or dlvd. 100 lbs. 9.00 -10.00
USP cbys. inclusive works. 100 lbs.24.00 -25.00
dms., works 100 lbs.13.50 -14.50

Acetic annydride (see Acetic anhydride above).

Acetylsalicylic USP special, bbls., makers, primary distrib., point of ship't, 1000-lb. lots lb. .69 - —
standard, fine cryst., gran., (30-40 mesh) powd. (80 mesh), bbls. same basis, lb. .55 - —

Freight equald, ship't identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St Louis

Adipic, fib. dms., works ton. .37 - .37½

Aminoacetic NF, bbls., frt. adjusted lb. 1.50 - 1.75

p-Aminobenzoic, tech., dms., works lb. 1.74 - 1.77

USP, dms., 1,000-lb. lots or more, works lb. 2.50 - —
smaller lots, works lb. 2.55 - 2.60

p-Aminosalicylic, dms., 1,000-lb. lots or more, frt. adjusted lb. 4.00 - —
smaller lots, same basis lb. 4.05 - 4.50

Anthranilic, bbls., frt. equald lb. 1.21 - —

Arsenous, tech (see Arsenic, white).

USP (see Arsenic trioxide).

Ascorbic USP dms., 25-50 kilo lots, kilo.21.00 - —
10-kilo lots kilo.21.35 - —
5-kilo lots kilo.21.75 - —
bots., 1-kilo lots kilo.22.00 - —
500-gram lots kilo.22.50 - —

Battery, cbys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E 100 lbs. 2.65 - 3.45

Benzoic, tech., bbls., dms., 100-lb. lots or more lb. .44 - —

USP, bbls., dms. 100-lb. lots or more lb. .54 - —

Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).

Betaoxynaphthoic (see Acid, b-Oxynaphthoic).

Boric, tech. 99½%, cryst., bgs., c.l., works ton.124.25- —
ton lots, ex whse., N. Y. or Chi ton.172.00- —
smaller lots, same basis, ton.177.00- —
bbls., c.l., works ton.148.75- —
ton lots, ex whse., N. Y. or Chi ton.196.50- —
smaller lots, same basis, ton.201.50- —
gran., bgs., c.l., works ton.99.25 - —
ton lots, ex whse., N. Y. or Chi ton.147.00- —
smaller lots, same basis, ton.152.00- —
bbls., c.l., works ton.123.75- —
ton lots, ex whse., N. Y. or Chi ton.171.50- —
smaller lots, same basis, ton.176.50- —
bulk, c.l., works ton.94.25 - —
powd., bgs., c.l., works ton.104.25- —
ton lots, ex whse., N. Y. or Chi ton.152.00- —
smaller lots, same basis, ton.157.00- —

Acid, boric, tech. powd., bbls., c.l., works ton.128.75- - —
bbls., c.l., works ton.128 75- —
ton lots, ex whse., N. Y. or Chi ton.176.50- —
smaller lots, same basis, ton.181.50- —

Boric acid in kegs $45.50 per ton higher than in paper bgs. USP boric acid $25 per ton higher.

Broenners, bbls lb. 1.76 - —

Butyric, 99%, dms., c.l., works, lb. .34 - —
l.c.l., works lb. .34½- —
tankcars, works lb. .32¼- —

Caeodylic, bots lb 10.50 -13.00

Camphoric natural, dms lb. 4.00 4.75
synth dms lb 4.00 4.75

Capric, dms lb. .26¼- .28

Caprylic, dms lb. .32¾- .34½

Cassella, dms frt alld lb. 1.44 1.75

Castor oil, split, dms lb. .35½- .36

Chicago, bbls., frt alld lb. 3.21 - —

Chloroacetic, mono-, purified, equald lb. .0465- —
flake, 99%, dms lb. .23½- .25½

o-Chlorobenzoic, fib. dms., works lb. 1.13 - —

p-Chlorobenzoic, fib. dms., works lb. 1.59 - 1.62

Chlorosulfonic dms., c.l., frt. equald lb. .0465- —
l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —

Acid, chlorosulphonic, in stainless steel dms. ½c. per lb. higher.

Cholic, 25-100-lb. bots., fiber dms. lb. .No prices.

Chromic 99¾%, dms., c.l., works lb. .27½- —
l.c.l., works lb. .28 - .29

NF (see Chromium trioxide)

Cinnamic, refd. bots lb. 2.50 - 3.50

Citric, USP, anhyd., gran., fine gran., dms., c.l. lb. .28¾- —
10,000-lb. lots, 1 ship't. lb. .29¼- —
smaller lots lb. .28 - .29½

Powdered citric acid ½c. higher.

Cleve's, mixed, bls lb. .79 - —

Coconut oil, dist., dms lb. .27 - .28¾
tankcars lb. 25¼- —
double dist., dms lb. .27¾- .29½
tankcars lb. .26 - —

Corn oil, dist., dms lb. .13 - .14¾
tanks lb. .11¼- —

Cottonseed oil, dist., dms lb. .11¼- .13
tanks lb. .09½- —
double, dist., dms lb. .11¾- .13½
tanks lb. .10 - .10¼

Acid, 2,3-Cresotic, dms., ton lots, works lb. .66 - —
smaller lots, works lb. .68 - —

Cresylic, coaltar dom., 50% 207°C or above, ret dms., c.l., frt. equald gal. .98 - —
l.c.l., same basis gal. 1.03 - —
non-ret., dms., c.l., same basis gal. 1.01 - —
l.c.l. same basis gal. 1.04 - —
tanks, same basis gal. .90 - —

204° to 207°C., ref., dms., c.l., same basis gal. 1.03 - —
l.c.l., same basis gal. 1.08 - —
non-ret., dms. c.l. same basis gal. 1.06 - —
l.c.l., same basis gal. 1.09 - —
tanks, same basis gal. .95 - —

Imp. 75% at 215°C. or over, dms., ex whse gal. .75 - .90

petroleum, dom., 195° to 213°C, non-ret dms., c.l., San Francisco and Los Angeles gal. .71 - —
l.c.l., same basis gal. .73 - .75
tanks, same basis gal. .58 - —

200° C. to 222° C., tanks, Wilmington, Cal gal. .58 - .63

211° C to 236° C non-ret. dms., c.l., San Francisco and Los Angeles gal. .63 - —
l.c.l., same basis gal. .65 - .67
tanks, same basis gal. .50 - —

220° C to 242° C. tanks, Wilmington Cal gal. .50 - .53

245° C to 298° C. tanks, Wilmington Cal gal. .46 - —

Crotonic, fib. dms., 200 lbs. or more, works lb. .45 - —

Cyanoacetic tech bbls lb. .90 - 1.25

Dehydrocholic injection, fib dms., 10 to 100-lb. lots lb. .No prices.
oral, fib., dms., 10 to 100-lb. lots lb. .No prices.

Desoxycholic fib dms 10 to 100-lb lots lb. No prices.

Dichlorophenoxyacetic (see under 'D' - 2,4-D)

Diethylbarbituric (see Barbital)

Diglycolic, bgs., works lb. .14 - —

2-Ethyl hexoic, dms., c.l., works lb. .35 - —
l.c.l., works lb. .35½- —
tanks, works lb. .33½- —

F, crude, paste, bbls., works lb. 2.10 - —

Folic, bots, fib. cns kilo-lots or more gram. 1.60 - —

Formic, 85%, cbys., c.l., works lb. .1570- —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625- —
l.c.l., works lb. .1675- .1775

Acid, fumaric, tech., bgs., dms lb. .27 - .28

Gallic, NF VII, bbls., 1,000-lb. lots lb 1.80 —
smaller lots lb 1.82 2.00
techaical bbls., 1,000-lb lots lb 1.58 —
smaller lots lb 1.69 1.78

Gamma dry, ground, bbls., frt. alld lb 1.50 —
paste, bbls., frt. alld lb 1.45 —

Gentisic, 100-lb fib. dms lb 8.50 - —

Gluconic, tech. 50% bots. lb. .23½ .31¼
cbys. lb. .19 —
dms. lb. .15½- —

l-Glutamic, 99½% fib. dms., 100 lb lots, works lb 2.45 2.53
25 lb. lots, works lb. 2.60 2.68

Glycerophosphoric, 35%, dms., works lb 2.25 2.35

Glycolic (see Acid, hydroxyacetic).

H, dry, bbls., works, basis 100% lb. .82 - —
paste, bbls., works, basis 100% lb. .80 - —

Hydriodic, 1.50 s.g., cbys lb. 2.94 - —
1.70 s.g., cbys lb. 3.33 - —

Hydrobromic, medicinal, 48%, cbys., dlvd E lb. .37 .43

Hydrochloric, anhydrous (see Hydrogen chloride).

18° cbys., c.l., works 100 lbs. 2.50 —
t.c.l., dlvd Metropolitan area 100 lbs. 2.90 3.05
tanks, works, frt equald ton.28.00 - —
20° cbys., c.l., works 100 lbs. 2.60 —
t.c.l., dlvd Metropolitan area 100 lbs 3.00 4.00
tanks, works, frt. equald ton.30.00 - —
22°, cbys c.l., works 100 lbs. 2.75 —
t.c.l. dlvd Metropolitan area 100 lbs. 3.25 4.50
tanks, works, frt. equald ton.35.00 - —
CP, USP, consumers, cbys., extra c.l., works lb. .11¾- —
t.c.l. same basis lb. 13¼ .13¾
5 pint bottles, extra cs., c.l., same basis lb 18¾ —
t.c.l. same basis lb 19¼ —

Acid, hydrocilloric, CP, USP prices to dealers 1½c. per lb less.

Hydrocyanic, cyls., frt. alld lb. .75 .95
dilute NF 2% 5-lb cans lb .40 —

Hydrofluoric, anhyd. (see Hydrogen fluoride).
tanks, works lb. .21 —
70%, steel dms., works lb. .18½- .22¼

Hydrofluosilicic, basis 30%, dms., works lb. .06 - —

Hydroxyacetic, tech. 70% bbls., non-return., Phila., basis 100% lb. .136 - —
tanks Belle, W Va., basis 100% lb. .095 - —

Hypophosphorous, purif., 30%, cbys lb 1.30 1.32
USP, cbys lb .88 —

Isonicotinic, 100 lb fib dms, works lb. 5.00 - —

Hydrazide (see Isoniazid).

J, bbls, works, basis 100% lb 2.50 2.85

Koch, bbls, frt. alld lb. .64 .70

L, bbls frt alld lb 1.25 —

Lactic, edible, 50% bbls., 20 or more lb .17 .20
smaller lots lb. .1750- .2100
80%, bbls., 5 or more lb. .30 .3640
smaller lots, lb. .305 .3690
plastic grade, 50% bbls. 20 or more, works lb. .2175- —
1 to 19 lb. .2225- .2275
80% bbls. 5 or more lb. .3815 —
tech., 22%, bbls., c.l., works, 100 lbs 6.30 —
t.c.l., works 100 lbs. 6.70 - —
cbys. works 100 lbs 7.20 -12.20
44% bbls. c.l. works 100 lbs 11.45 11.95
t.c.l., works 100 lbs. 11.85 -12.50
NF 85%, cbys lb. .85 .88

Laurent's, bbls lb .60 .67

Lauric, 90%, dms lb. .39½- .41¼
60%, dms lb. .23 - .24¼

Linseed oil, dist., dms lb. .2055- .2100
water white, dms lb. .2355- .2400

Maleic cryst. powd., dms. lb. .37 .38

Malic, tech. dms lb. .50 —

Mandelic NF dms., 1,000-lb. lots, lb 2.35 —
smaller lots lb 2.40 2.50

Metanilic, dms works lb .57 .75

Methacrylic, glacial, 98%, dms., truckloads, works lb. .74½- —
smaller lots, works lb. .75 - —

Molybdic, 85-92%, dms. works lb 1.27 —

Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
tech., flake, 96-97%, frt. equald, dms lb. .20 .21

Muriatic (see Acid, hydrochloric)

Myristic, flaked, dms lb. .27 - .28¾
solid, dms lb. .28 - .29¼

Naphthenic, 220-230 acidity, dms., works lb. .14 —
tanks, works lb. 12 —

Naphthol(1)-4-sulphonic (see Acid, Neville and Winther's)

Naphthol(1)-5-sulphonic (see Acid, L).

Naphthol(1)-5-sulphonic,3-amino (see Acid, S).

Naphthol(1)-3,6-disulphonic,8-amino (see Acid, H).

Naphthol(2)-6,8-disulphonic (see Acid, Gamma).

(2)-7-Sulphonic,3-amino (see Acid, J).

Naphtholsulphonic, mixed (see Acid, Cleve's, mixed).

Naphthylamine(1)-5-sulphonic (see Acid, Laurent's).
(2)-6-sulphonic (see Acid, Broenner's).
(2)-7-sulphonic (see Acid, F).
(2)-1-sulphonic (see Acid, Tobias).

Neville and Winther's, dms., frt. alld lb. 1.20 - —

Nicotinic, USP dms., frt. adjusted kilo 0.90 0.30

Amide (see Nicotinamide).

Nitric 36° Be cbys., c.l., works, E. 100 lbs. 5.25 —
t.c.l., works, E 100 lbs. 5.55 6.35
38° Be cbys., c.l., works, E. 100 lbs 5.75 —
t.c.l., works, E 100 lbs. 6.05 6.80

Acacia—Acid, Nitric, 38°Be

Abbreviations

Used in OPD Market Quotations

ACS	American Chemical Society	dextro	dextrorotatory	NF.	National Formulary
alld.	allowed	dist.	distilled	NNR.	New and Nonofficial Remedies
ammo.	ammonia	distr.	distributor	No.	number
amorph.	amorphous	djns.	demijohns	nom.	nominal
AMP.	American melting point	dlvd.	delivered	ord.	ordinary
anhyd.	anhydrous	dms.	drums	oz.	ounce
a.p.a.	available phosphoric acid	dom.	domestic	Pac.	Pacific
artif.	artificial	E.	east	pf.	proof
ASTM.	American Society for Testing Materials	e.p.	end point	phos.	phosphate
Be.	Baume	equald.	equalized	photo.	photographic
bbls.	barrels	exp.	expressed	pkgs.	packages
bgs.	bags	F	fahrenheit	powd.	powdered
bls.	bales	ferment.	fermentation	precip.	precipitated
bots.	bottles	ffa.	free fatty acid	prod.	producer
b.p.	boiling point	ffc.	free from chlorine	pt.	point
b.p.l.	bone phosphate of lime	fib.	fiber	pulv.	pulverized
b.r.	boiling range	f.o.b.	free on board	purif.	purified
bxs.	boxes	FPA	free of prussic acid	redist.	redistilled
C.	centigrade	frt.	freight	refd.	refined
cbys.	carboys	fus.	fused	refy.	refinery
CD.	completely denatured	gal.	gallon	reg.	regular
c.i.f.	cost, insurance, freight	gran.	granular	resub.	resublimed
cks.	casks	grd.	ground	ret.	returnable
c.l.	carlots	i.&a.	iron and aluminum	SD.	specially denatured
cns.	cans	i.b.p.	initial boiling point	s.d.	single distilled
col.	color	kgs.	kegs	S. E.	southeast
coml.	commercial	lacq.	lacquer	secs.	seconds
conc.	concentrated	lb.	pound	s.g.	specific gravity
CP.	chemically pure	l.c.l.	less than carlots	shipt.	shipment
cps.	centipoises	liq.	liquid	solut.	solution
cryst.	crystal	m.a.p.	mixed anilin point	s.u.	standard unit
cs.	cases	min.	minimum	synth.	synthetic
ctns.	cartons	m.p.	melting point	tanks.	railroad tankcars
cyls.	cylinders	N.	nitrogen	tech.	technical
dbl.	double	nat.	natural	USP.	U. S. Pharmacopoeia
denat.	denatured	neut.	neutral	vis.	viscosity
dest-dist.	destructive-distilled			VM&P	varnish makers & painters
				W.	west
				whse.	warehouse
				w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, Nitric, 40°Be—Alcohol, Ethyl

Acid, nitric, 40° Be, cbys., c.l., works, E 100 lbs. 6.25 - —
i.c.l., works, E .... 100 lbs. 6.55 - 7.35
42° Be cbys., c.l., works, E. 100 lbs. 6.75 - —
i.c.l., works, E .... 100 lbs. 7.05 - 7.85
58.5 to 68% HNO_3, tanks, works, basis 100% 100 lbs. 3.40 - —
94½ to 95½% HNO_3, tanks, works,, basis 100% 100 lbs. 4.40 - —
CP NF, consumers, cbys., extra c.l., works lb. .13½- —
i.c.l. same basis lb. .15 - .15½
5 pint bottles, extra, cs., c.l., same basis lb. .17½- —
i.c.l. same basis lb. .19 - .25
p-Nitrobenzoic, dms., works lb. .77 - —
Oleic, single distilled, dms .... lb. .15 - .16¾
tanks .... lb. .13¼- —
double dist. (white), dms. lb. .17½- .19¼
tanks .... lb. .15¾- —
Oleum (see Acid, sulphuric, fuming)
Orthochlorobenzoic (see Acid, o-Chlorobenzoic)
Orthocresotinic (see Acid, 2, 3-Cresotic)
Oxalic, bbls., c.l., works .... lb. .16½- —
10,000-lb. lots, works .... lb. .16¾- —
smaller lots, works .... lb. .17¾- —
p-Oxynaphthoic, bbls., works lb. 1.14 - —
Palm oil, double dist., dms .... lb. .12¼- .14
Para-aminobenzoic (see Acid, p-Aminobenzoic)
Para-aminosalicylic (see Acid, p-Aminosalicylic)
Parachlorobenzoic (see Acid, p-Chlorobenzoic)
Paramethylphenylcinchonic (see Neocinchophen)
Paranitrobenzoic (see Acid, p-Nitrobenzoic)
Paratoluidinmetasulphonic (see Acid, p-Toluidine m-sulfonic)
Phenylacetic, pure, cryst., cns. lb. .75 - 1.70

Acid, phenylcinchoninic (see Cinchophen).
Phenylglycolic (see Acid, mandelic).
Phosphoric, food grade, 75%, cbys. c.l., works 100 lbs. 7.30 - —
i.c.l., works .... 100 lbs. 7.80 - 8.30
tanks, works .... 100 lbs. 5.10 - —
NF, 85%, cbys., c.l., works lb. .08½- —
i.c.l., works .... lb. .09 - .09½
Picric, NF, bbls .... lb. .55 - —
dms small .... lb. .81 - .87
tech., bbls .... lb. .32 - .33
Propionic, synth. pure, dms., c.l., works lb. .21 - —
i.c.l., works .... lb. .22 - —
tanks, works .... lb. .19 - —
Pyrogallic, NF, (see Pyrogallol)
tech., bbls .... lb. 2.76 2.99
Pyroligneous, dms., incl., i.c.l, works gal. .36 —
whse. .... gal. .50½- —
Ricinoleic (see Acid, castor oil, split).
S bbls., works .... lb. 3.25 - —
Salicylic, crude, bgs .... lb. .38 - —
sublimed, tech., bbls., c.l. .... lb. .39 - —
i.c.l. .... lb. .46 - —
dyestuffs grade, bbls. .... lb. .41 - —
USP, cryst., bbls .... lb. .48 - —
powder, bbls .... lb. .53 - —
Sebacic, purified, dms., c.l., works. lb. .69 - —
i.c.l., works .... lb. .71 - .75
Soybean oil, double dist., dms. .... lb. .14½- .16¼
tanks .... lb. .12¾- .13
single dist., dms .... lb. .14½- .16¼
tanks .... lb. .12¾- —
Stearic, double pressed, bgs. .... lb. .14 - .15¼
single pressed, bgs .... lb. .13½- .15¼
triple-pressed, bgs .... lb. .16¼- .18
Succinic, purified, cryst., bbls., works lb .69 - .75

Acid, sulfanilic, tech., dms., c.l., frt. alld. lb. .19 - —
i.c.l., frt. alld .... lb. .21 - —
Sulfuric, 60° Be, cbys., c.l., works 100 lbs. 2.00 - —
i.c.l., works .... 100 lbs. 2.45 - —
tanks, works .... ton. 18.60 - —
66° Be, cbys., c.l., works .... 100 lbs. 2.25 - —
i.c.l., works .... 100 lbs. 2.55 - 3.35
tanks, works .... ton. 22.35 - —
98%, tanks, works .... ton. 23.50 - —
99-100%, tanks, works .... ton. 23.95 - —
CP, NF, consumers cbys. extra, c.l., works frt. equald .... lb. .09¾- —
i.c.l., same basis .... lb. .11¼- .11¾
5 pt. bots., extra, cs., c.l., works frt. equald lb. .13¼- —
i.c.l. same basis lb. .14¾- .20¾
oleum, 20%, tanks, works .... ton. 25.00 - —
40% tanks, works .... ton. 29.00 - —
60% tanks works .... ton. 39.50 - —
Tallow, dist., dms .... lb. .12¼- .14
hydrogenated, dms .... lb. .13¼- .15
Tannic, NF, fluffy, bbls., 1,000-lb lots lb 1.59 - 1.60
smaller lots lb. 1.65 - 1.76
powder bbls, 1,000-lb lots lb 1.50 - —
smaller lots .... lb. 1.51 - 1.69
tech., dms lb. .95 - —
Tartaric, USP, dom., 230 or 250-lb., dms., c.l. .... lb. .37 - —
10,000-lb. lots, 1 ship't. lb. .37½- —
smaller lots .... lb. .38 - —
100-lb dms .... lb. .39 - —
small dms .... lb. .41 - .47
imported, bgs. .... lb. .31 - —
Thioglycolic, refined, bgs., cbys., basis 100% lb. 1.60 - 1.86
Tobias, bbls., frt. alld .... lb. .74 - —
p-Toluenesulfonic dms., c.l., works. lb. .16 - —
i.c.l., works .... lb. .17½- —

Acid, p-toluidine-m-sulfonic, bbls., works lb. .92 - 1.04
Trichloroacetic, bots. .... lb. 2.00 - 2.50
Trichlorophenoxyacetic (see under "T" 2,4,5T)
Tungstic, tech, 99.9%, kgs., works. lb. 4.25 - 4.75
Undecylenic dms. .... lb 1.40 - —
Aconite root, bls .... lb. .50 - .55
Aconitine amorph., mild, bots oz. 27.50 - 32.50
cryst., potent, bots .... oz. 78.00 - 85.00
Acrolein, tech., dms., c.l., works. lb. .47 - —
i.c.l., works .... lb. .47½- —
Acrylonitrile, dms., c.l., works .... lb. .33 - —
i.c.l., works .... lb. .34 - —
tanks, works .... lb. .31 - —
ACTH, bots .... gm. 20.00 - —
Adeps lanae (see Lanolin).
Adrenocorticotropic hormone (see ACTH).
Agar, USP, Kobe No. 1, strip, bls. lb. 3.50 - —
powdered, 30 mesh, fio., dms .... lb. 3.85 - 3.95
dl-Alanine, dms., works .... lb. 8.50 -11.00
Albumen (egg), edible, flake, bbls. lb. 2.00 - 2.04
powder, bbls .... lb. 2.04 - 2.08
tech., cryst., bbls .... lb. 1.03 - 1.06
Albumin, blood, dark (see Blood, dried, solub.e)
light, dms., i.c.l. .... lb. .65 - .90
Egg (see Albumen).
Alcohol, allyl, dms., c.l., dlvd .... lb. .32 - —
i.c.l., dlvd .... lb. .33 - —
tanks, dlvd .... lb. .30 - —
Amyl, ex fusel oil (see Fusel oil, ref.)
fermentation, ref'd., 126°-132°C, dms., c.l., dlvd lb. .32¾- —
i.c.l., dlvd .... lb. .33¾- .36
tanks, dlvd .... lb. .31 - —
128-132° C. dms. i.c.l. dlvd. lb. .33¾- .36
ACS grade, dms., i.c.l., dlvd lb. .35¾- —
mixed, primary, dms., c.l., works .... lb. .20¼- —
i.c.l., works .... lb. .21¼- —
tanks, works .... lb. .18¼- —
1-pentanol (synthetic normal), dms., c.l., works .... lb. .42 - —
i.c.l., works .... lb. .43½- —
tanks, works .... lb. .40 - —
2-pentanol, dms., c.l., works .... lb. .65 - —
i.c.l., works .... lb. .70 - —
tanks, works .... lb. .60 - —
n-synthetic, dms., c.l., frt. alld., lb. .17 - —
i.c.l., frt. alld .... lb. .18 - —
tanks, frt. alld .... lb. .15 - —
sec-synthetic, dms., c.l., frt. alld., works .... lb. .19 - —
i.c.l., works .... lb. .20 - —
tanks, works .... lb. .17 - —
tert-synthetic, dms., c.l., frt. alld. E .... lb. .20 - —
i.c.l., frt. alld. E .... lb. .21 - —
tanks, frt. alld. E .... lb. .18 - —
Benzyl, NF, dms .... lb. .64 - .79
tech., dms., dlvd .... lb. .47½- .49
n-Butyl fermentation, dms., c.l., frt. alld .... lb. .15 - —
i.c.l., frt. alld .... lb. .16 - —
tanks, frt. alld .... lb. .13 - —
n-synthetic, dms., c.l., dlvd .... lb. .15 - —
i.c.l., dlvd .... lb. .16 - —
tanks, dlvd .... lb. .13 - —
sec-synthetic, dms., c.l., dlvd. lb. .13 - —
i.c.l., dlvd .... lb. .14 - —
tanks, dlvd .... lb. .11 - —
tert-synthetic, dms., c.l., frt. alld. lb. .14 - —
i.c.l., frt. alld .... lb. .15 - —
tanks, works .... lb. .12 - —
Capyrl, 85%, dms., c.l., works .... lb. .18 - —
i.c.l. works .... lb. .18½- —
tanks, works .... lb. .16½- —
95%, dms., c.l., works .... lb. .19½- —
i.c.l., works .... lb. .20 - —
tanks, works .... lb. .18 - —
Cetyl, extra fancy, cns., 500-lb lots or more lb. .73 - —
smaller lots .... lb. .80 - 1.15
NF, fib. cns., 140-lb lots or more lb. .58 - .82
smaller lots .... lb. .59 - .82
Cinnamic, bots .... lb. 2.15 - 2.75
Decyl, bots .... lb. 1.75 - 2.00
Industrial (see Decanol).
Denatured, CD12, CD13, CD14, CD17, dms., c.l., dlvd. E. of Rockies gal. .57½- —
i.c.l., dlvd., same basis gal. .62½- .68½
tanks, dlvd., same basis gal. .44½- —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.

Proprietary solvent, dms., c.l., dlvd. E. of Rockies gal. .59 - —
i.c.l., same basis .... gal. .64 - .70
tanks, same basis .... gal. .46 - —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Unit.

SD1, dms., c.l., dlvd. E. of Rockies .... gal. .58½- —
i.c.l., same basis .... gal. .63½- .69½
tanks, same basis .... gal. .45½- —
SD2B, dms., c.l., dlvd. E. of Rockies .... gal. .57 - —
i.c.l., same basis .... gal. .62 - .68
tanks, same basis .... gal. .44 - —
SD3A, dms., c.l., dlvd. E. of Rockies .... gal. .56 - —
i.c.l., same basis .... gal. .61 - .67
tanks, same basis .... gal. .43 - —
SD23A, dms., c.l., dlvd. E. of Rockies .... gal. .58½- —
i.c.l., same basis .... gal. .63½- .69½
tanks, same basis .... gal. .45½- —
SD23H, dms., c.l., dlvd. E. of Rockies .... gal. .59 - —
i.c.l., same basis .... gal. .64 - .70
tanks, same basis .... gal. .46 - —
SD29, dms., c.l., dlvd. E. of Rockies .... gal. .57½- —
i.c.l., same basis .... gal. .62½- .68½
tanks, same basis .... gal. .44½- —
SD30, dms., c.l., dlvd. E. of Rockies .... gal. .56 - —
i.c.l., same basis .... gal. .61 - .67
tanks, same basis .... gal. .43 - —
SD35A, dms., c.l., dlvd. E. of Rockies .... gal. .59 - —
i.c.l., same basis .... gal. .64 - .70
tanks, same basis .... gal. .46 - —
SD40, dms., c.l., dlvd. E. of Rockies .... gal. .57 - —
i.c.l. same basis .... gal. .62 - .68
tanks, same basis .... gal. .44 - —
Diacetone, acetone-free, dms., c.l., dlvd .... lb. .14 - —
i.c.l., dlvd .... lb. .15 - —
tanks, dlvd .... lb. .12 - —
tech., dms., c.l., dlvd .... lb. .13¼- —
i.c.l., dlvd .... lb. .14 - —
tanks, dlvd .... lb. .11½- —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies. gal. 20.51 - —
i.c.l., same basis .... gal. 20.56 - 20.62
tanks, same basis .... gal. 20.38 - —
tax free, dms., c.l., dlvd. E. of Rockies .... gal. .56 - —
i.c.l., same basis .... gal. .61 - .67
tanks, same basis .... gal. .43 - —
absolute, 200 pf., tax paid, dms., gal. 21.61 - —
i.c.l., same basis .... gal. 21.66 - 21.72
tanks, same basis .... gal. 21.48 - —
c.l., dlvd. E. of Rockies.

Armour's Neo-Fat® 18-54 assures stability . . . in processing . . . in finished products!

Armour is now using a manufacturing process which insures stable double pressed type stearic acids. All known heat stability tests show that Neo-Fat® 18-54 retains its light color and is resistant to rancidity even during high temperature processing. This high temperature color stability permits its use for light color ester manufacture.

To manufacturers of cosmetics, buffing compounds, emulsifying soaps, finishing agents, metallic stearates, candles, and other users of double pressed stearic, this stability means more uniform processing and longer shelf-life for the finished product.

A low ash content is of particular importance to candle manufacturers —Armour's method of producing double pressed stearic insures this desirable characteristic.

Write Armour today for samples of this double pressed stearic. You'll see how this improved acid fits into your product picture. Neo-Fat 18-54 is available in 50-pound multiwall bags.

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Alcohol, 2-ethylbutyl, dms., c.l., works lb. .29½- —
l.c.l., works lb. .30 - —
tanks, works lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E lb. .25½- —
l.c.l., same basis lb. .26½- —
tanks, same basis lb. .23½- —
Furfuryl, tech., cns., works lb. .29 - —
dms., c.l., works lb. .21 - —
l.c.l., works lb. .22 - —
tanks, works lb. .184 - —
Isoamyl (see Alcohol, amyl, fermentation, refined).
Isobutyl, dms., c.l., dlvd lb. .13¾- .14
l.c.l., dlvd lb. .14½- .15
tanks, dlvd lb. .12 - —
Iso-octyl, dms., c.l. dlvd lb. .23½- —
l.c.l., dlvd lb. .24¼- —
tanks, dlvd E lb. .21¾- —
Isopropyl refd., 91%, dms., c.l., dlvd gal. .50½- —
l.c.l., dlvd. gal. .57½- —
tanks, dlvd. gal. .37½- —
95%, dms., c.l., dlvd. gal. .52¾- —
l.c.l., dlvd. gal. .59¾- —
tanks, dlvd. gal. .39¾- —
99%, dms., c.l., dlvd. gal. .55 - —
l.c.l., dlvd. gal. .62 - —
tanks, dlvd. gal. .42 - —
Lauryl, bots. lb. 2.00 - 2.50
Methyl (see Methanol)
Methylamyl (see Carbinol, methyl-isobutyl)
Octyl, perfumer's grade, bots lb. 1.75 - 3.25
technical (see Octanol normal)
2-Phenylethyl, extra, dms lb. 1.57 - 2.15
standard dms lb. 1.35 -
n-Propyl, dms., c.l., dlvd lb. .12 - —
l.c.l., dlvd lb. .13 - —
tanks, dlvd lb. .10 - —
Polyvinyl, various grades, bgs., ton lots, works lb. .72½- .76
smaller lots works lb. .77½ .81
Tetrahydrofurfuryl, cns., Cedar Rapids, Iowa lb. .54 - —
dms., c.l., Niagara Falls, N. Y. lb. .44½- —
l.c.l., Newark, N. J. lb. .47 - —
tanks, Niagara Falls, N. Y lb. .43 - —
Industrial grade, dms., c.l., Niagara Falls, N. Y lb. .305 - —
l.c.l., Newark, N. J. lb. .33 - —
tanks, Niagara Falls, N. Y. lb. .29 - —
Wood (see Methanol).
Aldol, 95%, dms. works lb. .23 - —
denaturing grade, dms gal. 2.15 - —
Aldrin, 60% solut., dms., c.l. works frt. alld lb. .538 - —
l.c.l., works, frt. alld lb. .755 - —
Aletris root, bgs. lb. 1.73 - 1.85
Algin (see Sodium alginate).
Allethrin, 100%, dms., frt., alld lb 32.00 —
90%, dms., frt. alld lb. 28.80 -29.15
solution, 20% dms (100-lb lots frt. alld lb. 6.50 - 6.80
2½%, dms., frt. alld lb. .90 - 1.25
Allspice (see Pimento).
Allyl bromide, cnys., works lb. 1.35 - 1.40
Chloride, dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd. lb. .18 - —
tanks, dlvd lb. .15 - —
Starch, solid dms., works lb. .52¾- .54½
solution, 40% toluol-butanol, dms., works lb. .25½- .26¼
Aloe, Cape, cs lb. .29 - .32
powdered, cs. lb. .38 - .45
Curacao, kgs. lb. .50 - .55
Socotrine, kgs. lb. No prices
Aloin, USP, bbls., dms., kgs lb. 3.75 - 4.64
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphapinene (see a-Pinene).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium gran. bgs. works 100 lbs. 4.30 - —
lump, dms., works 100 lbs. 5.05 - —
powd., dms., works 100 lbs. 5.20 - —
USP, burnt dms lb .20 - .21
hydrous, dms lb .07¾- .08
Potassium, gran., bgs., works. 100 lbs. 4.55 - —
lump, dms., works 100 lbs. 5.30 - —
powd., dms., works 100 lbs. 5.45 - —
USP, burnt dms lb. .20 - .21
hydrous dms lb .07¾- .08
Potash-chrome, dms. lb. .17 - —
Sodium, dms., c.l. works 100 lbs. 4.60 - —
l.c.l., works 100 lbs. 5.00 - —
Alumina, calcined, bgs., c.l., works. lb. .0385- —
l.c.l., works lb. .0410- .0510
Aluminum acetate, basic solut., 24%, bbls. l.c.l. works lb. .14 - —
Chloride, com'l. anhyd dms., c.l., works, frt equald lb. .15 - —
l.c.l. works frt equald. lb. .1550- —
cryst., dms., c.l., works lb. .1030- —
l.c.l., works lb. .1070- —
solution, 32° chys., c.l., works. lb. .0369- —
l.c.l., works lb. .0435- .0960
tankcars, works 100 lbs. 2.80 - —
NF, gran., dms works lb. .29 - .31
Fluoride, tech., anhyd., bgs., c.l., works lb. .1540- —
l.c.l., works lb. .1640- .1890
Aluminum fluoride, in 6b. dms., 0.35c. per lb. higher.
Formate, basic solution, chys. lb. .09½- —
l.c.l. works lb .10 - —
Hydrate, heavy, bgs., c.l., frt. equald. ton 60.00 - —
l.c.l., works ton 65.00 -85.00
light bgs. dlvd lb. .17 - —
Hydroxide, gel, pnarmaceutical, 14-15% Al_2O_3 fib dms., works lb. .22 - —
contract, works lb. .21 - —
8-9½% Al_2O_3 6b dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP, XIV, 6b., dms., works lb. .82½- —
contract, works lb. .79½- —
powder, tech (see Aluminum hydrate).
Laurate precip. bbls lb. .44 - —
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .21½- —
pigs, 10,000-lb. lots, frt. alld. lb. .20 - —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .63½- —
standard, dms lb. .43 - —
Powder, lining, extra fine, dms lb. 1.02½- —
standard, dms lb. .72 - —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c per lb for 100-lb. dm., 1½c per lb for 50-lb dm. 3c per lb for 10-lb can and 5c to 12c per lb for smaller containers. Deduct 1c per lb for single shipment of 400 to 1,499 lbs. 2c for 1,500 to 4,999 lbs. 3c. for 5,000 to 29,999 lbs., and 4c. for 30,000 lbs or more. Where destination is within the continental U. S., a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over

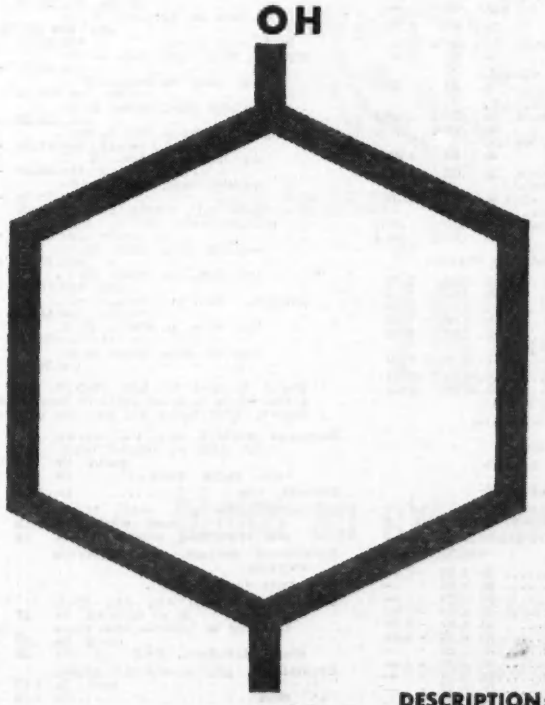
Resinate, precip., dms., frt. alld. lb. .27½- —
Stearate, dibasic, ctns., c.l. lb. .33 - —
l.c.l. lb. .34 - .37
monobasic, ctns., c.l. lb .33 - —
l.c.l. lb. .34 - .37
tribasic ctns., c.l. lb. .33 - —
l.c.l. lb. .34 - .37

Aluminum sulfate, com'l, bulk, c.l., works, 100 lbs. lb. 1.85 - —
ground, bgs., works ton 37.00 - —
lump bgs., works ton 46.00 - —
iron-free, bgs., c.l., works, frt. equald 100 lbs. 3.53 - —
l.c.l., works, frt. equald 100 lbs. 3.93 - —
USP gran., dms., works lb. .13 - .15
powd., dms., works lb. .14 - .16
Trihydrate heavy (see Aluminum hydrate, heavy).
Ambergris gray, bots oz. 8.00 -10.00
Aminoazotoluene, tech., bbls lb. 1.03 - 1.18
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .46½- —
l.c.l., dlvd lb. .47½- —
tanks, dlvd lb. .45 - —
2-Amino-2-methyl-1-propanol, cns., dms., works lb. .60 - —
Aminophylline, USP, 100-lb. dms. lb. 3.05 - —
Aminopyrine, USP, bots., dms lb. 4.75 - —
Ammonia, anhydrous, fertilizer, tanks, works ton 85.00 -88.00
pure, cycls, extra, zone 1 lb. .18½- —
2 lb. .19 - —
3 lb. .19½- .20
4 lb. .20 - —
5 lb .21 - —
refrigeration tanks, works ton 87.50 -90.50
Aqueous (29.4% NH_3), dms., c.l., dlvd., Met area 100 lbs. 3.60 - —
l.c.l., works 100 lbs. 4.00 - —
tanks, works, anhyd. basis. ton 96.00 - —
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
l.c.l., same basis 100 lbs. 8.65 -11.15
white gran. (see Ammonium chloride, tech.)
Ammoniacal liquor, tankcars, works, anhyd. basis ton 96.00 - —

Alcohol, 2-Ethylbutyl—Ammonium Thiocyanate

Ammonium acetate, purified, dms. lb. .38 - —
Benzoate, USP, dms, kgs., 4,000 lb lots frt. alld lb. .80 - —
smaller lots, frt. alld. lb. .81 - 1.08
Biborate, bbls., c.l., works ton 312.00 - —
ton lots ex whse ton 375.00 - —
smaller lots, ex whse ton 380.00 - —
Bicarbonate, dom., dms., c.l., works lb. 6.50 - —
l.c.l., works lb. 7.50 - —
imported dms. l.c.l lb. .07¼- .08½
Bichromate, bbls, works lb. .42 - .43
Bifluoride, dms., dlvd. lb. .2145- .2245
Bromide NF, gran. bbls lb. .38 - .39
dms. lb. .39 - .42
Powdered ammonium bromide 10c. per lb higher
Carbonate, USP, lump, powd., dms lb. .23 - .24
Chloride, tech., white granular, bgs., c.l., works 100 lbs. 5.25 - —
l.c.l., works 100 lbs. 7.00 - —
USP, gran., bbls., dms lb. .17¼- .18
Citrate, dibasic bbls lb. .75 - —
dms lb. .80 - .85
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia aqua).
Hypophosphite, NF, dms lb. 2.40 - —
Iodide, NF, dms., bots lb. 4.26 - 4.38
Linoleate, 80%, dms, works lb. .50 - .53
Nitrate, fertilizer grade, Canadian eastern, 33.5% N, bgs., c.l., shipping point ton 77.50 - —
western, 33.5% N., bgs., f.o.b. cars, Los Angeles ton 69.84 - —
Nitrate, fertilizer grade, domestic, bgs., western, works ton 68.00 -70.00
with dolomite, 20.5% N, bgs., Hopewell, Va ton 51.00 - —
Ammonium oxalate, fine gran., dms. lb. .26½- .31
Pentaborate, gran., bbls., c.l., works ton 222.00 - —
ton lots, ex whse ton 285.50 - —
smaller, lots, ex whse ton 290.00 - —
Ammonium pentaborate powder, $10 per ton higher
Perchlorate, kgs., works lb. .50 - .75
Persulfate, kgs lb. .38 - —
Phosphate, com'l bgs. c.l. works, frt equald lb. .08½- —
l.c.l., same basis lb .09 - —
dibasic, NF, V bots., dms lb. .45 - —
tech., bgs., c.l works, frt. equald lb. .08½- —
l.c.l., same basis lb. .09 - —
Salicylate, NF, dms., kgs lb. 1.62 - 1.64
Silicofluoride dms. works lb. .11 - .12
Sulfamate, bbls., dms., works lb. .18 - .20
Sulfate, coke-oven, bulk, producing ovens ton 44.00 -47.00
synthetic, bgs. c.l., western, works ton 49.50 - —
bulk, works ton 45.00 - —
purified, dms., works lb .08½- .10
Sulphide, liq., 40-44%, dms., c.l., frt. equald, basis 100%. ton 240.00 - —
l.c.l., basis 100%, works. ton 300.00 - —
tanks, frt. alld ton 180.00 - —
Sulfocyanide, tech. (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .18 - —
l.c.l., works lb. .20 - .25

Here's where
DU PONT p-AMINOPHENOL TECHNICAL
can help you...



In the preparation of

- PHARMACEUTICALS
- DYES
- ANTI-OXIDANTS
- PHOTOGRAPHIC CHEMICALS
- OIL ADDITIVES

DESCRIPTION: p-Aminophenol Technical is a light brown powder when freshly prepared, which darkens considerably on exposure to air. It is soluble in aqueous caustic alkali and dilute hydrochloric acid and may contain up to 0.5% hydrochloric acid insolubles as impurities.

SPECIFICATIONS: Purity: 97.0% minimum, by nitrite absorption.
Molecular weight: 109.1

WRITE US for complete information about this valuable intermediate. And if your process calls for a specific product, remember Du Pont has the facilities to produce custom-made intermediates—perhaps one that will meet your exact requirements. Our technical men will be glad to study your problems and work with you in product development.

E. I. du Pont de Nemours & Co. (Inc.)
Organic Chemicals Department, Chemicals Division
Wilmington 98, Delaware

ORGANIC CHEMICALS DEPARTMENT

DU PONT
REG. U.S. PAT. OFF.

BETTER THINGS FOR BETTER LIVING
...THROUGH CHEMISTRY

Ammonium Thioglycollate—Camphor, Synthetic

Ammonium thioglycollate, com'l., cbys., basis 100%.....lb. 1.60 - —
highly purified, cbys., basis 100% in.....lb. 1.70 - 1.90
Thiosulfate, cryst., photo grade, 6lb dms., frt. alld.....lb. .65 - —
60% solution, dms., c.l., works.....lb. .06½- —
Amphetamine hydrochloride dibasic, dextro, buts.....lb 28.00 - —
dextro-laevo, dms.....lb 6.00 - —
monobasic, dextro, buts.....lb 28.00 - —
Phosphate, dibasic, dextro, buts.....lb 28.00 - —
dextro-laevo, dms.....lb 6.00 - —
Sulfate, dextro, dms.....lb.28.00 - —
dextro laevo, dms.....lb. 6.00 - —
Amyl acetate, ex fusel oil, tech., frt. alld. E. of Rockies.....lb. .17 - —
l.c.l., same basis.....lb. .18 - —
tanks, same basis.....lb. .15 - —
ex pentane, dms., c.l., frt. alld. E. of Rockies.....lb. .17 - —
l.c.l., same basis.....lb. .18 - —
tanks, same basis.....lb. .15 - —
Alcohol (see Alcohol amyl).
n-Butyrate, dms.....lb. .90 - 1.05
Cinnamic aldehyde, dms.....lb. 1.05 - 2.00
Nitrite, USP, bots.....lb. 1.75 - 1.83
Salicylate, cns., dms.....lb. .74 - 1.05
Anethole, NF, cns., dms.....lb. 1.25 -1.55
tech., dms.....lb. .75 - 1.20
Angelica root, dom., bls.....lb. .60 - .70
Aniline oil, dms., c.l., works, frt. alld. .....lb. .21 - —
l.c.l., works, frt. alld.....lb. .22 - —
tanks, works, frt. alld.....lb. .20 - —
Salt, dms., frt. alld.....lb. .33 - —
Anise, Mexican, bgs.....lb. .22 - .23
Spanish, bgs.....lb. .22 Nom.
Syrian.....lb. .20 - —
Turkish, bgs.....lb. .26 Nom.
Anisic aldehyde, bots., dms.....lb. 1.80 - 2.70
Annatto seed, whole, bgs.....lb. .24 - —
powdered dms.....lb. .28 - —
Anthracene, 90-95% bbls., ton-lots, works.....lb. .80 - —
smaller lots, works.....lb. .85 - —
Anthraquinone, 99.5%, bbls., frt. alld.....lb. .88 - —
Antimony butter (see Ant.mony trichloride)
Metal, bulk, c.l., mines.....lb. .28½- —
cases, c.l., mines.....lb. .29 - —
Oxide, bgs., c.l., frt. alld.....lb. .26 - —
l.c.l., frt. alld.....lb. .27½- —
Sulfide, approx. 60%, bgs., dlvd. lb. .27 - .30
Trichloride anh., pails, c.l., works.....lb. .38½- —
l.c.l., works.....lb. .40½- —
Antimony-potassium tartrate (see Tartar emetic).
Antipyrine, NF, dms.....lb. 2.50 - 2.70
Apomorphine hydrochloride, USP, bots oz.23.40 -23.90
Areca nuts, powd., bbls.....lb. .15 - .16
Arecoline hydrobromide, NF, bots. tins oz. 4.50 - —
l-Arginine monohydrochloride, leavo, dms., l-kilo. lots kilo.77.00 - —
Argols, min 30%, bgs. shipment ports, per 100 kilos, basis 100% No prices
Arnica flowers (true montana), bls. .....lb. .70 - .71
Arsenic metal, lump bbls., prompt ship't.....lb. .70 - —
Trioxide, USP, dms.....lb. .48 - —
White, powd., bbls., c.l., dlvd.....lb. .05½ -
l.c.l. dlvd.....lb. .06½- .07½
Asafetida, cs.....lb. .36 - .39
powd. bbls. dms.....lb .50 .53
Asbestine (see Talc, fibrous, N. Y.)
Asbestos, Canadian, crude, No. 1, c.l. (20 tons), mines.....ton.1,300.00- —
No. 2, c.l. (20 tons), mines.....ton.675.00 - —
Run-of-mine, c.l., (20 tons), mines.....ton.556.00 - —
3K, c.l. (20 tons), mines.....ton.436.00 - —
3R, c.l. (20 tons), mines.....ton.371.00 - —
3T, c.l. (20 tons), mines.....ton.348.00 - —
3Z, c.l. (20 tons), mines.....ton.321.00 - —
4K, c.l. (20 tons), mines.....ton.173.00 - —
4M, c.l. (20 tons), mines.....ton.173.00 - —
4T, c.l. (20 tons), mines.....ton.156.00 - —
4Z, c.l. (20 tons), mines.....ton.156.00 - —
5D, c.l. (20 tons), mines.....ton.122.50 - —
5K, c.l. (20 tons), mines.....ton.122.50 - —
5M, c.l. (20 tons), mines.....ton.116.50 - —
5R, c.l. (20 tons), mines.....ton.110.00 - —
6D, c.l. (30 tons), mines.....ton.78.00 - —
7D, c.l. (30 tons), mines.....ton.68.50 - —
7F, c.l. (30 tons), mines.....ton.65.00 - —
7H, c.l. (30 tons), mines.....ton.55.00 - —
7K, c.l. (30 tons), mines.....ton.46.00 - —
7M, c.l. (30 tons), mines.....ton.40.00 - —
7R, c.l. (30 tons), mines.....ton.39.00 - —
7T, c.l. (30 tons), mines.....ton.37.00 - —
7RF, c.l. (30 tons), mines.....ton.40.00 - —
7TF, c.l. (30 tons), mines.....ton.40.00 - —
8S, c.l., (30 tons), mines.....ton.27.00 - —

Asbestos c.l. prices are in U. S. funds. L.c.l. lots, $4 per ton higher.

Asphalt, gilsonite, black, jet, bgs., c.l., Craig, Colo., Heber City, Utah.....ton.34.00 - —
Asphalt, gilsonite, select, 350°F., fusing point, bgs., c.l., same basis.....ton.38.00 - —
370°-295°F fusing point bgs. c.l. same basis.....ton.37.00 - —
seconds, 300° - 390°F. fusing point, not uniform, bgs., c.l., same basis.....ton.34.00 - —
Manjak, No. 10, crude, dms., works.....lb. .06½- —
Petroleum, cut-back, tanks, tank-wagon, refinery.....gal. .09 - —
emulsion, tanks, tank wagon refinery.....gal. .09½- .10
steam-refd., less than 80 penetration tanks, tankwagon, refinery.....ton.22.00 - —
80-300 penetration, tanks, tank-wagon, refinery.....ton.21.00 - —
Aspirin (see Acid, Acetylsalicyclic).
Atropine USP, bots.....oz. 8.00 - 8.50
Sulfate, USP, bots.....oz. 4.00 - 4.50

B

Bacitracin, bulk, 1,000,000,000 or more units.....50,000 units. .70 - —
less than 1,000,000,000 units.....50,000 units. .75 - —
Balm of Gilead buds, dried, bgs.....lb. 1.35 - 1.45
Barberry root, bark, bags.....lb. .28 - .30
Barbital, USP, 100-lb. dms.....lb. 4.50 - —
Sodium, USP, dms.....lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works.....ton 92.50 - —
smaller lots works.....ton 102.50 - —
Chlorate kgs., works.....lb .32 - .36
Chloride, anhyd. bgs., c.l., works.....ton 158.00 - —
l.c.l., works.....ton 168.00 - —
NF, cryst., dms.....lb .18 - —
Chromate, bgs., frt. equald.....lb. .35 - —
Dioxide (see Barium peroxide).
Hydrate, crystals, bgs.....ton.190.00 -200.00
Iodide, bots.....lb. 6.14 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., works.....lb. .12½- —
l.c.l., works.....lb. .14 - —
Oxide, grd., dms., c.l., frt. equald. .....ton.255.00 - —
l.c.l., works.....ton.265.00 - —
Barium peroxide, dms., works.....lb. .16 - —
Stearate, ctns., c.l., frt. alld.....lb. .37 - —
l.c.l., same basis.....lb. .38 - .42
Sulfate, tech. (see Barytes and Blanc fixe).
X-ray, dms.....lb .14 - .14½
Sulfide, dms., c.l., works.....ton.85.00 - —
l.c.l., works.....ton 95.00 - —
Barytes, Southern off-color, bgs. mines.....ton.25.00 - —
95.75%, bgs., mines.....ton.25.00 - —
water-grd., paper bgs., c.l., E. St. Louis.....ton.41.60 - —
ex-whse., N. Y.....ton.60.10 - —
Bauxite, bulk, mines.....ton 9.50 10.00
Bay leaves (see Laurel leaves).
Belladonna leaf, bls.....lb .28 - .32
root, bls.....lb. .45 - .50
Bentonite, dom., 200 mesh, bgs., works.....ton.14.00 - —
imported, Italian white high gel., bgs., 5 ton-lots, ex-whse.....ton.80.60 - —
1 ton-lots, ex wise.....ton 83.10 - —
low gel, bgs., 5 ton-lots, ex-whse.....ton.78.95 - —
1 ton-lots, ex whse.....ton.81.45 - —
Benzal chloride, cbys., works.....lb. .22 - .23½
Benzaldenyde, NF, dms.....lb. .74 1.05
tech., cbys., dms.....lb. .44 - —
Benzene (see Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., bgs., dms., c.l., works, gamma unit.....lb. .009 - .01
l.c.l., works, gamma unit-lb. .015 - —
dust, dry, distributors, dms., c.l., dlvd., gamma unit-lb. .013 - —
l.c.l., dlvd., gamma unit-lb. .014 - —
wet, distributors, dms., c.l., dlvd., gamma unit.....lb. .02 - —
l.c.l., dlvd., gamma unit-lb. .021 - —
Benzidine hydrochloride, bbls., frt. alld., basis 100%.....lb. 1.00 - —
Benzocaine, dms.....lb. 3.48 3.50
Benzol, pure or nitration, tanks, works
Bethlehem, Pa.....gal. .40 - —
Birmingham district.....gal. .40 - —
Chicago district.....gal. .40 - —
Cleveland district.....gal. .40 - —
Geneva, Utah.....gal. .40 - —
Johnstown, Pa.....gal. .40 - —
Lackawanna, N. Y.....gal. .40 - —
Lone star, Texas.....gal. .40 - —
Lorain, Ohio.....gal. .40 - —
Minnequa, Colo.....gal. .59 - —
Philadelphia district.....gal. .40 - —
Pittsburgh district.....gal. .40 - —
Sparrows Point, Md.....gal. .40 - —
Syracuse, N. Y.....gal. .40 - —
Terre Haute, Ind.....gal. .40 - —
Youngstown, Ohio.....gal. .40 - —
Benzophenone, dms.....lb. 1.40 1.70
Benzonitrile, dms., c.l., works.....lb. .46¾- —
l.c.l., works.....lb. .47 - —
Benzotrichloride, cbys., frt. equald. .....lb. .18 .20
Benzoyl chloride, cbys., dms., c.l., works frt equald.....lb. .21½ .24½
l.c.l., same basis.....lb. .22½ .25½
Peroxide, pure, fib. ctns., works. .....lb .90 1.05
Benzyl acetate, f.f.c., cns., dms.....lb. .62 - 1.04
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c., cns., dms.....lb. .62 - 1.10
Chloride, tech., cbys., dms., c.l., works, frt. equald.....lb. .20½- .23½
l.c.l., same basis.....lb. .21½ .24½

High grade benzyl chloride, 2c. higher.

Cinnamate, cns.....lb. 3.30 - 3.75
Formate, cns.....lb. 1.90 2.10
Propionate, bots.....lb. 1.35 1.80
Salicylate, bots.....lb. 1.50 - 1.85
Benzylidene acetone, bots.....lb. 1.68 - 2.05
Chloride (see Benzal chloride).
Benzyl isoeugenol, cns.....lb. 8.60 - 9.10
Berberine bisulfate, cns.....lb.35.00 -36.25
Hydrochloride, bots.....lb.35.00 -36.25
Betagammapicoline (see b,g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical).
Biotin cryst., bots.....gram.10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, jars.....lb 5.11 - —
Hydroxide, dms.....lb 4.65 - —
Metal, nxs. ton lots.....lb 2.25 - —
Nitrate, cryst., dms.....lb. 2.10 - —
Oxide, anhydrous, dms.....lb. 4.47 - 5.05
Oxychloride, dms.....lb. 4.37 - 4.42
Phenolsulfonate, fib. dms.....lb. 5.22 - —
Subcarbonate, USP, dms.....lb. 3.20 - —
Subgallate, NF, fib. dms.....lb. 3.15 - —
Subiodide, fib. dms.....lb. 5.37 - —
Subnitrate, NF, dms.....lb. 2.65 - —
Subsalicylate, USP, dms.....lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., tars.....lb. 4.22 - —
Black, acetylene, bgs., c.l., works, cs., l.c.l., ship't point.....lb. .22½- .26
Ash (see Barium Sulphide).
Bone, dms., l.c.l., frt. alld.....lb. .15½- .22
Pacific coast bone black prices, 2c. per lb higher
Carbon, channel, beads, bulk, c.l., works.....lb. .07 - —
bgs., c.l., works.....lb. .0740- —
l.c.l., dlvd. or whse.....lb. .1225- —
uncompressed, regular bgs., c.l., works.....lb. .12 - —
l.c.l., dlvd. or whse.....lb. .19 - —
furnace, fast extruding, bgs., c.l., works.....lb. .06 - —
ctns., l.c.l., whse.....lb. .10 - —
high abrasion, bulk, c.l., works. .....lb. .0750- —
bgs., c.l., works.....lb. .0790- —
l.c.l., dlvd. or whse.....lb. .122 - .125
high modulus, bgs., c.l., works. .....lb. .0550- —
ctns., l.c.l., whse.....lb. .0950- —
semi-reinforcing, bgs., c.l., works.....lb. .045 - —
bgs., cns., l.c.l., whse.....lb. .065 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works. .....lb. .12¾- —
l.c.l., works.....lb. .13 - —
Lamp, bgs., c.l., works.....lb. .16 - .45
Mineral, bgs., works.....lb. .0160- .0675
Blackberry root bark, bls.....lb. .50 - —
Black haw root bark, bls.....lb. .65 - .70
tree bark, bls.....lb. .40 - .42
Blanc fixe, dry, byproduct, bgs., c.l., works.....ton.155.00 - —
l.c.l., works.....ton.165.00 - —
direct process, bgs., c.l., works. .....ton.100.00 - —
l.c.l., works.....ton.110.00 - —
N. Y. whse.....ton.140.88 -165.00
pulp, 70%, bbls., c.l., works. ton.105.00 - —
l.c.l., works.....ton.115.00 - —
Bleaching powder, dms., c.l., works, 100 lbs. 5.02 - —
l.c.l., works.....100 lbs. 6.52 - —
Blood, dried, 16-16½% ammo., bgs., unit-ton. 8.00 - —
high-grade, unground, 16-17% ammon., bgs., Chicago unit-ton. 8.25 - —
soluble, bgs., c.l.....lb. .16½- .18
l.c.l.....lb. .17½- .25
Bloodroot, bls.....lb. .60 - .65
Blue alkali, dry, bbls., dlvd. N. or Tenn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis.....lb. 2.00 - —
toner, bbls., litho flushed, same basis.....lb. 1.15 - —
Chinese, bbls., same basis.....lb. .48 - —
Cobalt, genuine, bbls., same basis.....lb. 4.90 - —
imitation (see Blue, ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese, Milori, Prussian, Russian and Soda).
Methyl violet, toner, molybdated, PMA, bbls., same basis.....lb. 2.60 - —
tungstated, PTMA, bbls., same basis.....lb. 3.95 - —
Milori, bbls., same basis.....lb. .48 - —
Peacock, uglitive, 100% color strength, bbls., same basis.....lb. .75 - —
Phthalocyanin, full strength, bbls., same basis.....lb. 3.45 - —
resinated, bbls., same basis.....lb. 3.00 - —
water dispersable.....lb. 1.54 - —
Potash, CP, bbls., same basis.....lb. .53 - —
Prussian, insoluble, bbls., same basis.....lb. .48 - —
soluble, bbls., same basis.....lb. .48 - —
Soda, CP, bronze, bbls., same basis.....lb. .56 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis.....lb. .30½ .35
jobbing types, bbls., same basis. .....lb. .16½- .18½
regular types, dry, bbls., same basis.....lb. .22½- .35
Victoria toner, molybdic, PMA, bbls.....lb. 4.10 - —
tungstated, PTMA, bbls.....lb. 5.15 - —

Blue dry colors, dlvd. prices 1/2c higher Ala., Fla., Ga., La. (Shreveport, 1¼c), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c higher, Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.

Vitriol (see Copper sulphate).
Bluestone (see Copper sulphate).
Bonemeal, steamed, works, E.....ton.55.00 - —
Bone phosphate, defluorinated (see Di-of lime (see Calcium phosphate, tribasic)
precipitate, (see Calcium phosphate tribasic, NF precip.).
Borax, tech, anhydrous, bgs., c.l., works.....ton.78.00 - —
ton lots, ex whse, N. Y. or Chi.....ton 125.75- —
bulk, c.l., works.....ton.70.00 - —
crystals, 99%, bgs., c.l., works. .....ton.67.25 - —
ton lots, ex-whse., N. Y. or Chi.....ton.115.00 - —
smaller lots, same basis. .....ton.120.00 - —
gran., decahydrate, 99½%, bgs., c.l., works.....ton.41.25 - —
ton lots, ex whse., N. Y. Chi.....ton.89.00 - —
smaller lots, same basis. .....ton.94.00 - —
bulk, c.l., works.....ton.35.75 - —
pentahydrate, 99½%, bgs., c.l., works.....ton.55.50 - —
smaller lots, same basis. .....ton.103.25 - —
ton lots, ex whse, N.Y., Chi.....ton.108.25 - —
powder, 99½%, bgs., c.l., works.....ton.46.25 - —
ton lots, ex-whse., N. Y. or Chi.....ton.94.00 - —
smaller lots, same basis. .....ton.99.00 - —

Borax packed in kgs., $45.50 per ton higher than in paper bgs.; in barrels, $24.50 higher. USP borax $15 per ton higher.

Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse. point.....lb. .16 - .24
l.c.l., same basis.....lb. .19 - .26
Borneol, cns.....lb. 2.85 4.50
Boron trifluoride gas, cyls., truckload, works.....lb. .62 - —
less truckload, works.....lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).
Bromine, purified, cs., c.l., dlvd. E. of Rockies.....lb. .27 - —
l.c.l., up to 1,000-lb. lots, same basis.....lb. .29 - —
dms., lead-lined, dlvd.....lb. .34 - —
Bromoform, pharmaceutical grade, bots.....lb. 1.62 - 2.60
cbys.....lb. 1.52 - —
Bromstyrol, bots.....lb. 5.40 - 5.70
Bronze powder, aluminum (See A).
Brown, iron oxide, pure, bgs., c.l., works.....lb. .13¾- —
l.c.l., works.....lb. .14 - —
Oxide, metallic, bgs., works.....lb. .04 - —
Sap, crystals, bgs., works.....lb. .12 - —
powdered, bgs.....lb. .13 - —
Sienna, burnt, paper bgs., c.l., works.....lb. .04¼- .15¼
l.c.l., works.....lb. .04½- .15½
raw, paper, bgs., c.l., works.....lb. .04½- .13
l.c.l., works.....lb. .04¾- .13¼
Umber, burnt, American, bgs., c.l., works.....lb. .06 - —
l.c.l., works.....lb. .06¼- .07
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y.....lb. .06¾- —
l.c.l., works.....lb. .07 - —
raw, American, bgs., works.....lb. .06¼- .06½
Turkey-type, bgs., works.....lb. .06¾- .07
Vandyke, bbls., works.....lb. .09½- .12
Brucine, cns., 100-oz. lots.....oz. .20 - .35
Sulphate, NF, cns., 100-oz. lots.....oz. .15 - .30
Buchu leaves, bls.....lb. .45 - —
Butadiene, refined, cyls., refinery.....lb. .22 - —
tanks, refinery.....lb. .15 - —
Butane, indust., tanks, group 3.....gal. .04½- —
n-Butyl acetate, fermentation, dms., c.l., frt. alld.....lb. .15 - —
c.l., same basis.....lb. .16 - —
tanks, same basis.....lb. .13 - —
n-synthetic, dms., c.l., dlvd. E. .....lb. .15 - —
l.c.l., same basis.....lb. .16 - —
tanks, same basis.....lb. .13 - —
sec-synthetic, dms., c.l., dlvd. E. .....lb. .12½- —
l.c.l., same basis.....lb. .13¼- —
tanks, same basis.....lb. .10¾- —
Alcohol (see Alcohol butyl).
Aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works.....lb. .37½- —
l.c.l., works.....lb. .38 - —
Ether (see Ether butyl)
Lactate, dms., c.l., frt. alld. E. of Rockies.....lb. .35 - —
l.c.l., same basis.....lb. .36 - —
tanks, same basis.....lb. .33 - —
Butyl laurate, dms., works.....lb. .39 - —
Methacrylate normal, dms., less truckloads, works.....lb. .70 - —
Oleate, refd., dms., l.c.l., works.....lb. .32 - —
Phenylacetate, dms.....lb. 4.50 - 4.60
Phthalate (see Dibutyl phthalate).
Stearate, dms., l.c.l., frt. equald .....lb. .34 - .37½
Butylamine (see Mono-, Di- or Tri-).
Butyraldehyde, dms., c.l., dlvd.....lb. .21½- —
l.c.l. dlvd.....lb. .22½- —
tanks, dlvd.....lb. .19½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide, jars.....lb. 6.75 - 7.05
Metal, ingots or sticks, cs., dlvd. .....lb. 2.00 - —
Stearate, dms., ton lots.....lb. 1.42 - —
smaller lots.....lb. 1.44 - —
Caffeine, natural, USP, cryst., dms., 100-lb. lots or more.....lb. 2.65 - —
anhydrous, dms.....lb. 2.85 - —
synthetic USP, cryst., dms., 100 lb. lots or more.....lb. 2.65 - —
anhydrous, dms., 100 lbs. or more.....lb. 2.85 - —
Citrated, USP, dms., 100 lb. lots or more.....lb. 2.65 - —
Calamine, USP, dms.....lb. .34 - —
Calciferol, cryst., vials, 1 kilo lots, works gram. .80 - —
25 to 100 gram lots, works, gram. .90 - .95
in edible oil dms., 10,000 or more standard units (1 standard unit equals 1,000,000 USP units), works unit. .04¾- —
5,000 to 10,000 standard units, works unit. .05¼- —
less than 1,000 standard units, works unit .05¾- —
Calcium arsenate, dealers, dms., c.l., whse. works, frt. alld. on 96 lbs. or over.....lb. .09 - .10
l.c.l., same basis.....lb .10 - .11
Bromide, NF, jars.....lb. .92 - .94
Carbide, standard generator size, dms., c.l., dlvd.....ton.134.40 - —
Carbonate, natural, dry-grd., air floated, 99.5%—325 mesh, bgs., c.l., works.....ton. 7.50 -10.00
chalk, whiting, 325 mesh, bgs., works.....ton.32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works.....ton.30.00 - —
10 to 20 microns, bgs., c.l., works.....ton.17.00 -18.00
precipitated, dense, bgs., c.l., works.....ton 30.00 -33.00
l.c.l., works.....ton.40.00 -48.00
medium, bgs., c.l., works.....ton.35.00 - —
l.c.l., works.....ton.45.00 -50.00
surface treated, bgs., c.l., works.....ton.35.00 -50.00
l.c.l., works.....ton.45.00 -65.00
ultrafine, bgs., c.l., works. .....ton.110.00 -160.00
l.c.l., works.....ton.120.00 -175.00
smaller lots, same basis. .....ton.130.75- —
Chloride, cryst., purified, dms.....lb. .27 - —
flake 77-80%, paper bgs., c.l., works, frt. equald.....ton.27.00 - —
liquor 40%, tankcars, works, frt. alld.....ton.11.50 - —
pellets, bgs., c.l., works.....ton.33.00 - —
powder, bgs., c.l., works.....ton.37.65 - —
solid, 73-75%, dms., c.l., frt. equald.....ton.25.50 - —
l.c.l., works, same basis .....ton.34.00 -71.00
USP, gran., dms.....lb. .40 - —
Chromate, bgs., frt. equald.....lb. .29½- .30
Cyanide, dms., dlvd. E. of Rockies. .....lb. .24 - .50
Gluconate, AA, bbls., dms.....lb. .70 - .72
USP, bbls., dms.....lb. .63 - .65
Glycerophosphate, NF, fib. dms. .....lb. 2.30 - 2.45
Hydride, dms., works.....lb. 2.20 - 4.00
Hypochlorite, high test, cased (45 lbs.), dlvd. E. of Rockies.....cs.22.60 -24.75
dms., 100-lb., same basis.....dm.28.65 -32.50
Hypophosphite, dms., ton lots or less.....lb. .90 - .93
Iodide, jars.....lb. 4.52 - —
Lactate, USP, dms., 10,000-lb. lots or more, works.....lb. .40 - —
smaller lots, works.....lb. .41 - .48
Mandelate, USP, dms., works.....lb. 2.10 - 2.25
Naphthenate, liq., 4% Ca, dms., frt. equald.....lb. .27¼- —
Nitrate, tech., bbls., works.....lb. .13 - —
fertilizer grade, bgs., c.l., Los Angeles.....ton.48.00 - —
Pantothenate, dextro, jars, 100 gram lots or more, frt. adjusted.....gram. .07½- —
Para-aminosalicylate, fib. dms., 1,000-lb. lots or more, frt. adjusted.....lb. 7.00 - —
smaller lots, same basis.....lb. 7.05 - 7.50
Phenolsulphonate, dms.....lb. .70 - —
Phosphate, dibasic, USP, bgs., c.l., 100 lbs. 7.10 - —
l.c.l.....100 lbs. 7.60 - 7.95
feed grade, bgs., c.l., works. .....ton.74.00 -90.00
l.c.l., bgs., works.....ton.85.00 -95.00
monobasic, bgs., 10,000-lb. lots, works, frt. equald.....100 lbs. 6.40 - —
smaller lots, same basis. .....100 lbs. 6.90 - —
tribasic, precip., NF, bgs., c.l., works.....100 lbs. 7.60 - —
l.c.l., works.....100 lbs. 7.95 - —
Phytate, bgs., works.....lb. .37 - —
Resinate, precip., dms., frt. alld., works.....lb. .27¾- —
Silicate, hydrated, bgs., c.l., works. .....lb. .06 - —
l.c.l., works.....lb. .06½- —
Stearate, ctns., c.l.....lb. .35 - —
l.c.l.....lb. .36 - .40
Sulphate (see Gypsum)
Calcium-strontium sulphide, phosphorescent steel pails, 100 to 999 lb. lots, works.....lb. 2.60 - 3.50
fine particle size, same basis, works.....lb. 2.65 - 3.75
Calomel, USP powd dms.....lb. 4.02 - 4.05
Camphene, 46° m.p., dms., incl., c.l., works.....lb. .1930- —
l.c.l., same basis.....lb. .1980- .2115
tanks, same basis.....lb. .1660- —
Chlorinated, 67-69% (see Toxaphene).
Camphor monobromated, NF, dms., kgs.....lb. 3.00 - 3.13
natural, USP, powd., bbls., 100-lb. lots.....lb. .51 - .53
tablets 1-oz. ½ oz. cs.....lb. .63 - .65
synthetic, tech., bbls., 10 bbls., 1,500-lb. lots.....lb. .55½- —
smaller lots.....lb. .56 - .66
USP, gran., powd., bbls., 2,000-lb. lots.....lb. .57 - —
1,000-lb. lots.....lb. .58 - —
smaller lots.....lb. .59 - —
tablets, tins, 2,000-lb. lots.....lb. .90 - —
1,000-lb. lots.....lb. .91 - —
smaller lots.....lb. .92 - —

Canada balsam (see Fir balsam).
Cantharides, Chinese, cs. lb. 2.00 - 2.05
powd., bxs. lb. 2.25 - 2.30
Russian, bgs. lb 4.00 - 4.05
powd., bxs. lb. 4.35 - 4.40
Capsicum (see Pepper, red).
Oleoresin NF from domestic pepper, dms. lb. 4.75 - 5.75
from African pepper, dms lb. 4.75 - 6.25
Caramel coloring, NF, bbls. gal. 1.05 - 1.20
Caraway seed, Dutch, bgs. lb. .14 - .14½
Carbazole, 97% bbls. ton lots, works lb. 1.05 - —
Carbinol, methylisobutyl, dms., c.l., dlvd lb. .15 - —
l.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
Carbon bisulphide, 55-gal. dms., c.l., works frt. alld competitive points lb. .0750- —
l.c.l., same basis lb. .0850- —
5-gal. dms., c.l., same basis lb. .1025- —
l.c.l., same basis lb. .1125- —
tankcars same basis lb. .0525- —
Dioxide, industrial, wholesale, bulk ton. 73.00 -115.00
cyls. lb. .08 - —
solid lb. .035 - .040
Tetrachloride, CP, dms., works lb. .11 - .13¾
works lb. .11 - .13¾
NF, chys lb. .17 - .18
tech., dms. c.l. E. of Rockies, frt. alld lb .0525- —
W. of Rockies, f.o.b., stock-points lb. .0975- —
l.c.l., E. of Rockies, frt. alld, alld lb. .115 - —
W. of Rockies, f.o.b. stock-points lb. .12 - —
tanks E. of Rockies, frt. alld, lb .0825- —
W. of Rockies, f.o.b. stock-points lb. .0875- —
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb 4.00 - 4.25
smaller lots, works lb 4.10 - 4.75
Cardamom fruit, fancy, bleached, A, cs. lb. 3.60 - —
medium, cs. lb. 3.30 - —
decorticated, Alleppey, cs lb. 1.90 - —
Guatemalan, cs. lb. 1.94 - —
green, Alleppey, bgs. lb. 1.90 - —
Ceylon, bgs. lb. 2.25 - —
seed (see Cardamom fruit decorticated).
Carmine, No. 40, NF, bulk, 100 lb. lots or more, dlvd lb. 6.50 - —
smaller lots, dlvd lb. 6.65 - 7.15
Carotene, technical, 1,350,000 A units per gram, tins, works gm. .55 - —
in carrot oil 5,000,000 to 8,000,000 A units, per lb., dms., works, million units. .18 - —
microcrystalline in oil, 400,000 A units per gram, tins, works, million units. .33 - —
Carvol, bots lb. 4.75 - 9.65
Cascara sagrada bark, bulk lb. .34 - —
Casein, dom acid precip, standard, bgs. 10,000-lb lots or more, ship't point lb. .28 - .33
premium bgs 10,000-lb lots or more, ship't point lb. .35 - .40
imported Argentine acid-precip., grd., 100-bg. lots or more, duty paid lb. .21½- .23
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J lb. .22 - —
ton lots, same basis lb. .23 - —
dm. lots, same basis lb. .25 - —
Cassia, Batavia, cuttings, bls. lb. .16½- —
longstick, cracked, bls. lb. .19 - .19½
shortstick, cracked, bls. lb. .17 - .17½
Saigon, broken, bls. lb. No stocks.
medium, bls. lb. 1.00 - —
thin, bls. lb. No stocks.
Castor beans, bgs., f.o.b. Brazilian ports long ton. 105.00 Nom.
Oil (see Oil, castor)
Pomace, bgs., c.l., works ton. 25.00 - —
Castoreum, artificial, cns lb. 9.00 - —
natural, cns lb. 5.00 -30.00
Catechol, CP cryst., fib. dms., works lb 2.17½ —
resublimed, dms., works lb. 4.29½- —
Catnip leaves, Southern, bls. lb. .75 - —
Celery seed, French, bgs. lb. .43½- —
Indian, bgs. lb. .18½- —
Celluloid scrap (see Pyroxylin scrap).
Cellulose acetate, flake, ctns., dlvd. lb. .43 - .46
extrusion compounds, transluscent, metallic pearls, special black dms., c.l., same basis lb. .52 - —
l.c.l., same basis lb. .53 - .59
molding, composition, transluscent, metallic pearls, special black, dms., c.l., frt. alld lb. .48 - —
l.c.l., same basis lb. .49 - .55
reprocessed black, dms., l.c.l., same basis lb. .43 - .49
Acetate-butyrate flake, 17% butryl content, standard cartons, works lb. .54 - —
27% butyryl content, standard cartons, works lb. .64 - —
38% butyryl content, standard cartons, works lb. .54 - —
50% butyryl content, standard cartons, works lb. .63 - —
molding composition, plain colors, pearls, transparents, special black, dms., l.c.l., frt. alld lb. .64 - .71
reprocessed, black, dms., l.c.l., same basis lb. .52 - .53
Triacetate, flake, ctns., works, frt. alld. on 100-lb. lots or more lb. .50 - —
Cerium hydrate, 74% CeO_2, fib dms., 100-lb lots or more lb. 1.44 - —
77% CeO_2, fib dms., 100-lb. lots or more lb 1.74 - —
Oxalate, NF, bbls., bgs., works lb. 1.05 - —
Oxide, optical grade, bgs., 50-lb. lots or more, works lb. 1.85 - 1.96
smaller lots works lb. 2.03 - 2.23
Chalk (see Calcium carbonate).
Chamomile flowers, Hungarian style, cs lb. .70 - .75
Roman cs lb. 1.00 - 1.15
Charcoal, activated, NF, fib. dms., c.l., works lb. .25 - .32
5-ton lots, works lb. .26½- .32½
smaller lots works lb. .27 .50
Bone (see Black, bone).
Hardwood, briquets, bgs., c.l., works ton. 77.00 -83.00
granular bgs. works ton 77.00 —
bulk c.l., works ton. 70.40 - —
Pinewood, gran., powd., bgs., c.l., works, South ton. 53.50 -63.50
l.c.l., works, South ton. 53.50 -63.50
lump bgs., c.l., works, South. ton. 50.00 —
l.c.l., works, South ton. 53.00 -67.50
bulk, c.l., works, South ton. 31.50 - —
Chestnut extract, liquid, 25% tannin, bbls., c.l., works lb. .0510- —
l.c.l., works lb. .0543- —
tanks, works lb. .04¼- —
powd., 60% tannin, bgs., extra, c.l., works lb. .1092- —
l.c.l., works lb. .1165- —

Chloral, tech., 94% min., dms., c.l. works lb. .23 - —
l.c.l., works lb. .24 - —
tanks, works lb. .21 - —
Hydrate, USP, 40-lb. jars, 1,000-lb. lots lb. 1.30 - —
500-lb. lots lb. 1.33 - —
100-lb lots or less lb. 1.35 1.40
Chloramine T, NF, bbls., works lb. .75 - 1.00
Chlordane, agricultural, dms., pails, c.l., frt. alld lb. .65 - —
l.c.l., frt. alld lb. .66 - .73
refined, dms., c.l., frt. alld lb. .75 - —
l.c.l., frt. alld lb. .76 - .83
Chlorinated paraffin, 42%, dms., c.l., frt. alld lb. .15½- —
l.c.l., same basis lb. .16½- —
70%, dms., c.l., same basis lb. .18 - —
l.c.l., same basis lb. .19 - —
Rubber, 5, 10, 20 cps., ctns., c.l., works lb. .55 - —
l.c.l., works lb. .56 - —
125, 1,000 cps., ctns., c.l., works lb. .60 - —
l.c.l., works lb. .61 - .63
Chlorine, liquid, cyls., c.l., works, frt. equald lb. .09½- —
l.c.l., Met. area lb. .11 - .12¼
tanks, single units, works, frt. equald 100 lbs. 2.53 - —
multiple units, 5 cars, works, frt. equald 100 lbs. 3.80 - 3.83
3 cars, same basis 100 lbs. 3.80 - —
2 cars, same basis 100 lbs. 5.00 - —
1 car, same basis 100 lbs. 6.00 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - .183
l.c.l., same basis lb. .19 - .20
tanks, same basis lb. .17 - .171
USP, dms lb. .30 .35
Chloro (4), —2 amino-toluene, bbls lb. 1.38 - —
Chlorophyll, oil soluble, 4%, not fixed, tins, pails, works lb. 4.25 - —
copper fixed, 6½%, tins, pails, works lb. 4.25 - —

Chlorophyll, sodium-copper, aqueous solut., 4%, dms., pails, works lb. 3.75 - —
8%, pails, dms., works lb. 4.00 - 4.80
14% dms., works lb. 8.90 - —
concentrated, dom., 50%, dms., works, basis 100% lb. 55.00 -60.00
75%, dms., works, basis 100% lb. 45.00 -60.00
90%-100%, dms., works, basis 100% lb. 45.00 -60.00
imported .60%, tins, basis 100% lb. 58.00 - —
90%, tins, basis 100% lb. 58.00 - —
75%, tins, basis 100% lb. 58.00 - —
Chloropicrin, com'l, bots. lb. 1.50 - —
cyls. 180 lbs frt alld lb .95 - —
100 lbs., same basis lb. .97 - —
25 lbs., same basis lb 1.22 - —
Cholesterol, USP, fib dms., 250-lb. lots lb. 6.85 - —
Choline bitartrate, fib. dms., frt. adjusted lb. 1.50 - 1.75
Chloride fib. dms., frt. adjusted, lb. 1.50 - 1.75
Dihydrogen citrate, fib. dms., frt. adjusted lb. 1.50 - 1.75
Chromium acetate, powd. 72% Cr., bbls. works lb. No stocks.
solut., 7½% bbls. works lb. .08½ —
chys. works lb. .10¼ —
8½%, bbls. works lb. .09 - —
chys. works lb. .10¾- —
Chromium fluoride, bbls., works lb. .51 - .52
Green (see Green, chrome).
Oxide (see Green, chromium oxide)
Oleate, solid, bbls lb. .40 - —
Trioxide NF bots lb. .33 - .39
Yellow, (see Yellow, chrome).
Chrysarobin, USP, bots. lb. 6.50 - 6.00

Cinchona bark, NF, red, broken, bgs lb. .33 - .40
yellow, broken, bgs lb. .35 - .40
Cinchonidine, cryst. cns. 100-oz. lots, oz. .65 - —
Sulphate, cns., 100-oz. lots oz. .37 - .40½
Cinchonine cryst. cns., 100-oz. lots, oz. .52 - .57
Sulphate, NF, cns., 100-oz lots oz. .27½ .30½
Cinchophen, NF, heavy density, dms. frt adjusted lb. 3.70 4.05
standard density, dms., same basis lb. 3.50 3.85
Cinchophen-sodium, dms., frt. adjusted lb 4.50 4.85
Cinnamic alcohol (see Alcohol cinnamic).
Cinnamon, Ceylon, No. 2, bls. lb. .43 - .44
"0000," bgs lb. .55 - —
Citral, bots., cns lb. 3.00 - 3.75
Citronellal, bots., dms lb. 1.85 - 2.50
Citronellol, bots., dms lb. 2.00 - 2.53
Civet, artificial bots lb 13.75 15.00
natural, bots oz. 7.50 -15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn. ton. 19.50 - —
crushed, bulk, Tenn ton. 10.00 - —
purified, bgs., c.l., Tenn ton. 20.50 - —
imported, airfloated, bgs., c.l., Atlantic port, long ton. 43.00 -45.00
lump, bulk, Atlantic port, ton. 27.00 -30.00
China, dom dry grd. air-float, 99%, 325 mesh, bgs., c.l., Georgia, works ton. 10.00 - —
l.c.l., Georgia, works ton. 15.50 - —
300 mesh, bgs., c.l., Georgia, works ton. 13.50 -14.50
l.c.l. ton. 35.00 -36.00

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Make an extra profit on your lacquer thinners

The use of Eastman isobutyl acetate to replace all or part of the ketone content of thinner formulations can frequently result in considerable savings.

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Clay, China, Imp.—Dyes, Coaltar, Gen'l Use, No. 657

Clay, China, imported, white, lump, bulk, c.l., ex dock, Phila., Portland, Me. gross ton 20.00 - 35.00
powd., bgs., c.l., ex dock net ton 50.00 —
l.c.l., ex whse net ton 60.00 - 65.00
Clove, Madagascar, bls lb. .77 - —
Zanzibar, bls lb. .77 - —
CMC, purified high vis (see Gum cellulose).
standard, low vis., bgs., 23,000 lbs. or over, works frt. allwd lb. .60 - —
smaller lots, same basis lb. .62 - —
medium vis ngs 23,000 lbs or over, works, frt. alld lb. .57 - —
smaller lots same basis lb. .59 - —
technical high vis 58% purity, bgs. 20,000 lbs or more, dlvd E, 100% basis lb. .56 - —
2,000 to 20,000 lbs. dlvd E, basis 100% lb. .58 - —
less than 2,000 lbs. dlvd E, basis 100% lb. .62 - —
low vis., 80% purity, bgs., in fib. dms., 23,000 lbs dlvd E., basis 100% lb. .41 - —
less than 23,000 lbs dlvd. E., basis 100% lb. .43 - —
62% purity, bgs., or fib dms., c.l., dlvd. E., basis 100% lb. .41 - —
l.c.l. dlvd E. basis 100% lb. .43 - —
58% purity, bgs., c.l., dlvd. E. basis, net weight lb. .34 - —
l.c.l., dlvd. E. lb. .36 - —
47½% purity, c.l., dlvd., E., basis 100% lb. .41 - —
l.c.l. dlvd E lb. .43 - —
36½% purity, bgs. c.l., dlvd. E., basis net weight lb. .13½ - —
l.c.l. dlvd E lb. .20 - —
CMC prices W of the Rockies are 1c per lb. less than dlvd. E. price.

Coaltar crude resale dms. c.l. ex-whse gal. .275 - .3025
l.c.l., ex whse. gal. .285 - .3135
tanks, ex works gal. .154 - .165
refined, resale, dms. c.l., ex-whse. gal. .2850 - .3135
l.c.l., ex-whse gal. .2950 - .3245
tanks, ex whse gal. 1650 - 1760
Cobalt acetate, 23.7%, bbls., dlvd. lb. 1.30 - 1.37
Carbonate, 46% powd., bgs., dlvd. lb. 2.15 - 2.28
Chloride 34.2% Co. kgs. dlvd. lb. 1.20 - 1.27
Hydrate 60-61% Co., bbls., dlvd. lb. 2.72 - 2.90
Linoleate, fused, 8½% Co., dms. lb. .75¾ -
liquid, 6% Co., dms lb. .61 - —
Metal, 97-99% kgs., ex whse lb. 2.60 - —
Naphthenate, liquid, 6% Co., dms., dlvd lb. .48¼ - —
Nitrate, 20.1% Co., bbls., dlvd lb. 1.06 - 1.12
Phosphate powdered 21% Co., kgs., dlvd lb. 1.69 - 1.79
Oxide, black, 72½-73½% Co., kgs. lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Resinate fused, 3% Co., dms lb. .29¾ - —
Sulpnate cryst. 21% Co dms., dlvd lb. .89 - .95
monohydrated 33% Co. dms dlvd lb. 1.40 - 1.49
Tallate, 6% Co., dms., dlvd lb. .45 - .53½
Cocaine, USP, cns., 100-oz lots oz 15.00 - —
Hydrochloride, cns., 100-oz. lots oz 11.75 - —
Cochineal USP gray bgs lb 68 - .90
Cocillana bark, bgs lb. .45 Nom.
Cocoa butter, bgs. lb. 1.10 - —
Codeine, NF, cns., 100-oz. lots oz. 13.25 - —
Hyurochloride cns. 100-oz lots oz 11.75 - —
Phosphate USP cns. 100-oz lots oz 10.25 - —
Sulphate, USP cns. 100-oz lots oz 10.75 - —
Codliver oil (see Oil codliver).
Cohosh root, black, bls lb. .22 - .25
blue, bls lb. .25 - .28
Colchicine, USP, bots., cns oz. 35.00 - —
Colchicum root, bls lb. .45 - .55
seed, bgs lb. .80 - 1.10
Collodion USP dms lb .32½ - —
flexible USP. dms lb. .34 - —
Colocynth pulp bls lb. .25 - .30
Colombo root, bls lb. .20 Nom.
Copaiba balsam, cns., dms lb. .85 - .90
Copper acetate bbls. c.l. works lb .34¾ -
l.c.l., works lb. .35¾ - —
Carbonate 55% bgs., works lb. .263 - .278
Chloride anhyd., bbls., works lb. .39 - —
crystals, bbls., works lb. .26¼ - —
Cyanide tech. bbls. 1,000-lb lots or more lb. .619 - —
smaller lots lb. .639 - —
Gluconate cns, dms lb 3.00 3.24
Hydrate cms. frt. alld E bliss. lb. .40¼ - .40¾
Metal, electrolytic, dlvd., Valley basis lb. .29½ - .30
Naphthenate, liquid, 8% Cu., dms., frt. alld lb. .21½ - —
Nitrate tech. cryst. bbls. works. lb. .33¼ - —
Oleate, solid, 9% Cu, dms., works lb. .45 - —
Oxide, black, bbls., works lb. .39 - .47½
red, com'l bbls., works lb. .42½ - .49½
Oxychloride, bls., frt. alld lb .40 - .50½
Quinolinolate fib dms lb 4.25 - 4.50
Resinate, precip., dms. frt. alld lb. .27½ - —
Stearate, bgs., 5 tons to c.l., dlvd lb. .37½ - —
ton lots, dlvd lb. .38½ - —
smaller lots, dlvd lb. .39½ - —
Sulphate, CP, gran., bbls., works lb. .1715 - —
cryst., 98%, bgs., c.l., works, 100 lbs. 10.35 - —
l.c.l., works 100 lbs. 10.60 - 11.35
monohydrated, 35% dms., c.l., works 100 lbs. 17.10 - 17.55
tribasic, dealers, bgs., c.l., works, frt. alld. 100 lbs. 22.50 - —
l.c.l., works 100 lbs. 23.00 - 24.50
USP gran., cryst., dms lb 1715 - —
Undecylenate dms. lb 2.90 3.00
Copperas, gran. bgs., c.l., works ton 34.50 - —
l.c.l., dlvd., metropolitan area, 100 lbs. 3.35 - 4.25
bbls., c.l. works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
Copra, Atlantic, Gulf ports, c.i.f. ton. 220.00 - —
Pacific ports, c.i.f. ton. 220.00 - —
Coriander seed, Moroccan, bgs lb. .07½ - —
Roumanian, bgs. lb. .07½ - —
Corn sugar, tanners, chipped, paper bgs. c.l. 60,000 lbs min. 100 lbs 7.31 - —
bgs., l.c.l. 100 lbs. 7.46 - —
Syrup, 42° dms., c.l. 100 lbs 7.32 - —
l.c.l 100 lbs 7.47 - —
Corrosive sublimate, NF, cryst., dms., 50-lb lots or more lb 3.68 - —
gran powd., dms., 50-lb lots or more lb 3.53 - —
Cortisone acetate, NNR, bulk gm. 4.75 - —
Cottonseed hull ash, 32-36% potash, bgs., dlvd., unit-ton. 1.25 - —
Meal, 41%, sacked, mills ton. 70.00 Nom.
36%, sacked, same basis ton. 66.00 Nom.
Coumarin cryst., NF, cns lb 2.94 3.15
powd., cans lb 4.20 3.25
Cramp bark, NF, bls lb. .85 - .90
Cream of tartar, NF, dom., gran. or powd., dms., c.l. lb. .32 - —
bbls. 5,000 lbs one shipment lb. .32½ - —
smaller lots, bbls., kgs lb. .33 - .36
imported, kgs. lb. .24 - .25
Creosote carbonate, NF, bots. cbys. lb. 3.05 - 3.26
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
solution 80% tanks works, gal. .2063 - —
refined, dms. c.l., works gal. .3850 - —
l.c.l. same basis gal. .4510 - —
tanks, same basis gal. .2970 - —
Wood, beechwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb. 1.30 - 1.35
pinewood, dms., works gal. .42½ - .50½
Cresol, tech. 50% below 204°C., dry above 207°C. wide distillation range, non ret. dms. c.l. frt equald lb. .133 - —
l.c.l. same basis lb. .136 - —
ret. dms. c.l. same basis lb. .1325 - —
l.c.l. same basis lb. .1375 - —
tanks, same basis lb. .120 - .1225
USP, non-ret. dms., c.l., same basis lb. .143 - —
l.c.l. same basis lb. .146 - —
ret. dms., c.l., same basis lb. .140 - —
l.c.l. same basis lb. .145 - —
tanks, same basis lb. .120 - —
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼ - .25
Cryolite, nat., industrial, bgs., c.l., works 100 lbs 10.50 - —
l.c.l., works 100 lbs. 11.25 - 11.50
Insecticide, dealers, bgs., c.l., dlvd 100 lbs. 14.00 - —
l.c.l., dlvd. 100 lbs. 15.00 - —
Cube root, powd., 5% rotenone, bgs., works lb. .24 - .25
Cubeb berries, XX, NF, bgs lb .50 - .51
powd., cs. lb .58 - .59
Cumene, dms., c.l., works lb .12 - —
l.c.l., works lb .14 - —
tanks, works lb .11 - —
Cumin seed, Iranian, bgs. lb. .15 Nom.
Moroccan, bgs lb. .15 - —
Turkish, bgs lb. .14½ - .15
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08½ - —
Cyanamide fertilizer mixing grades, 20.6% N, gran., bgs., Niagara Falls, Ont., contract ton. 55.00 - —
pulv., 21% N, bgs., works unit-ton 2.75 - —
Cyclohexane, tech., dms., c.l., works, gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —
Cyclohexanol, tech., dms., c.l., works, frt. alld., E lb. .28½ - .37¾
l.c.l., works, same basis lb. .30 - .38¼
tanks, works, same basis lb. .27 - .36¼
Cyclohexanone, tech., dms., c.l., works lb. .33½ - —
l.c.l., works lb. .35 - —
tanks, works lb. .32 - —
Cyclohexylamine, dms., c.l., works, lb. .46½ - —
l.c.l., works lb. .47½ - —
tanks, works lb. .45 - —
Cyclopropane, CP, 2-lb. cyls., works, cyl 45.00 - —
6 oz. cyls., works cyl 12.00 - —
USP, hospitals, cyls., 40-gal. lots gal. .8 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

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2 4-D, bbls., c.l., works, frt. equald, lb .51 - —
l.c.l., same basis lb .56 - .63
Isopropyl ester, dms., c.l., works lb. .55 - —
l.c.l., works lb. .60 - .67
Dandelion root, bls lb. .35 - .40
DDD, tech., fine grd., fib. dms., c.l., works lb .50 - —
l.c.l., works lb .51 - —
DDT powder, bgs., c.l., works, frt. equald lb. .27 - —
smaller lots, same basis lb. .29 - —
fib. dms., c.l., same basis lb. .28 - —
smaller lots, same basis lb. .30 - —
Decanol, normal, tech., dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd lb. .37 - —
tanks, dlvd. lb. .32½ - —
Deertongue leaves, bls lb. .45 - .48
Defluorinated phosphate, 13% P, paper bgs., works ton. 49.50 - —
Rock, 17% P, paper bgs., works, ton. 56.00 - —
14½% P, paper bgs., works, ton. 48.00 - —
Degras, common, bbls. lb. .11 - .12
neutral, less 2% ffa., bbls lb. .26 - .27
over 2% ffa., bbls lb. .25 - .26
Derris root, 5% rotenone powd., bbls lb. .26 Nom.
Desoxyephedrine hydrochloride dextro, bots lb 25.00 - —
dextro-laevo, bots lb 6.50 - —
Dextrin, corn, gum, paper bgs, c.l., 100 lbs. 8.95 - —
l.c.l. 100 lbs 9.10 - —
canary paper bgs, c.l. 100 lbs 8.69 - —
l.c.l. 100 lbs 8.84 - —
dark, paper bgs., c.l. 100 lbs 8.79 - —
l.c.l. 100 lbs 8.94 - —
white, paper bgs., c.l. 100 lbs 8.53 - —
l.c.l. 100 lbs 8.68 - —
Corn dextrin in cotton bgs 25c. per 100 lbs. higher.
Potato bgs lb .10¼ - .11
Dextrose, USP, dms. lb. .17¾ - —
Diacetone (see Alcohol diacetone).
Diacetyl, flavor grade, bots lb 4.50 - 5.50
Diamyl ether (see Ether, amyl).
Dianisidin, dms. lb 2.00 - —
Diatomaceous earth, reg., bgs., c.l., dlvd., California ton. 50.00 - —
East coast ton. 61.00 - —
l.c.l. ex whse ton. 90.00 - 100.00
purified, bgs., c.l., dlvd., California ton. 65.00 - —
East coast ton. 75.00 - —
l.c.l., ex whse ton. 100.00 - 110.00
Dibenzyl sebacate, CP, dms., c.l., E lb. .89¾ - .90
l.c.l., same basis lb. .90¼ - .91
tanks, same basis lb. .88 - —
Dibutyl phthalate, dms., c.l., dlvd. E lb. .34¾ - —
l.c.l., same basis lb. .35¾ - —
tanks, same basis lb. .33 - —
Sebacate, dms., c.l., works, dlvd lb. .73½ - —
l.c.l., works, dlvd lb. .74 - —
tanks, works, dlvd lb. .71½ - .72
Tartrate, dms., works, frt. alld lb. .64 - .71
Dibutylamine, dms., c.l., dlvd lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Dicapryl phthalate, dms., c.l., dlvd. lb. .33½ - .34
l.c.l., dlvd lb. .34½ - .35
tanks, dlvd lb. .32 - —
Sebacate, dms., c.l., works lb. .68 - .68½
l.c.l., works lb. .68½ - .69½
tanks, works lb. .66½ - —
Dichloroaniline, dms., works lb. .75 - .83
Dichlorodiphenyltrichloroethane (see DDT).
Dichloroethyl ether (see Ether, dichloroethyl).
Dichloropentanes, dms., c.l., works, lb. .05 - —
l.c.l., works lb. .05¾ - —
tanks, works lb. .04¼ - —
Dicyclohexylamine, dms. c.l. works, lb. .51 - —
l.c.l., works lb. .51¾ - —
tanks works lb. .49¾ - —
Dicyclohexyl phthalate, fib. dms., c.l., frt. alld lb. .60 - —
l.c.l., same basis lb. .61 - —
Dieldrin, dms. frt. alld lb. 1.92 - —
l.c.l., frt. alld lb. 2.40 - —
Diethanolamine dms. c.l. dlvd a. lb. .29¼ - —
l.c.l. same basis lb. .30¼ - —
tanks same basis lb. .27½ - —
Diethyl carbonate, dms., c.l., frt. alld lb. .46¾ - —
l.c.l. same basis lb. .47¾ - —
tanks same basis lb. .45 - —
Maleate, dms., c.l., dlvd lb. .50 - —
l.c.l. dlvd lb. .48¼ - —
tanks dlvd lb. .43¼ - —
Oxalate, dms., c.l., frt. alld lb. .41¾ - —
l.c.l. same basis lb. .42¾ - —
tanks same basis lb. .40 - —
Phthalate, dms., c.l., dlvd lb. .27 - —
l.c.l. dlvd. lb. .28 - —
tanks, dlvd. lb. .25 - —
Sulphate, dms., c.l., works lb. .18¾ - —
c.l. works lb. .19¼ - —
tanks works lb. .17 - —
Diethylamine, dms., c.l., dlvd. E lb. .50½ - —
l.c.l., same basis lb. .51½ - —
tanks, same basis lb. .48½ - —
Diethylaniline, dms. c.l., frt. alld., lb. .51 - —
l.c.l., same basis lb. .52 - —
tanks, same basis lb. .50 - —
Di-2-ethylhexyl adipate (see Dioctyl adipate).
Phthalate (see Dioctyl phthalate).
Diethyleneglycol dms. c.l. dlvd works, lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
tanks, same basis lb. .15½ - —
Boriborate, dms., l.c.l. lb. .30½ - —
Diethylether, dms., c.l., works lb. .46½ - —
l.c.l. works lb. .47 - —
Monobutylether, dms., c.l., works lb. .28¾ - —
l.c.l., works lb. .29¼ - —
tanks, works lb. .27 - —
Acetate, dms., c.l., works lb. .30 - —
c.l. works lb. .30½ - —
tanks, dlvd. E lb. .25¼ - —
Monoethylether dms., c.l., dlvd lb. .20¾ - —
l.c.l., dlvd lb. .21½ - —
tanks, dlvd lb. .19½ - —
Acetate, dms., c.l., works lb. .26¾ - —
l.c.l., works lb. .27¼ - —
tanks, dlvd. E. lb. .25¼ - —
Monomethylether, dms., c.l., works lb. .20 - —
l.c.l., works lb. .21 - —
tanks, works lb. .18½ - —
Diethylenetriamine dms., c.l., dlvd works, lb. .43 - —
l.c.l., same basis lb. .44 - —
tanks, same basis lb. .41¼ - —
Diethylethanolamine, dms. c.l., dlvd lb. .67½ - —
l.c.l. same basis lb. .68½ - —
tanks, same basis lb. .65½ - —
Diethylstilbestrol, USP, bots., 10-kilo lots kilo 110.00 - —
1-kilo lot kilo. 120.00 - —
Digitalis leaves, USP, dom., dms., lb. .90 - 1.10
Digitoxin, USP, bots. gram 5.50 - 6.50
Diglycol laurate, dms lb. .31½ - .33
Oleate dms lb. .28½ - .29½
Stearate, dms lb. .25 - .26½
Dihexyl sebacate, dms., c.l., works lb. .69 - —
l.c.l., works lb. .69½ - .70
tanks, works lb. .67 - —
Dihydrazine sulphate, dms., works lb. 1.10 - 1.25
Dihydrostreptomycin hydrochloride, bulk gram. .17 - —
Sulphate, bulk gram. .17 - —
Dihydroxydichlorodiphenylmethane, pure dms lb 2.80 3.00
tech., dms lb 1.04 1.14
Di-isobutyl ketone, dms., c.l., dlvd. lb. .15½ - —
l.c.l., dlvd lb. .16½ - —
tanks, same basis lb. .13½ - —
Phthalate, dms., c.l., dlvd. E lb. .34 - —
l.c.l., same basis lb. .35 - —
tanks, same basis lb. .32 - —
Di-isobutylene, dms., c.l., works lb. .10 - —
l.c.l., works lb. .11 - —
tanks, works lb. .08 - —
Di-iso-octyl phthalate, dms. c.l., dlvd lb. .36 - —
l.c.l., same basis lb. .37 - —
tanks, same basis lb. .34 - —
Sebacate, dms., c.l., works, dlvd lb. .68½ - —
l.c.l., works, dlvd lb. .69½ - —
tanks, works, dlvd lb. .66½ - .67
Di-isopropylamine dms. c.l., dlvd. E. of Rockies lb. .50 - —
l.c.l., same basis lb. .51 - —
tanks same basis lb. .48 - —
Dilliseed, dewhiskered, bgs lb. .16 - —
natural, bgs lb. .14 - .14½
Dimethyl anthranilate, cns lb 5.25 - 5.75
Chloroacetal dms. c.l. works lb .53 - —
l.c.l. works lb .55 - —
tanks works lb .51 - —
Hydroquinone, dms lb. 1.70 - 2.75
Phthalate, dms., c.l., works lb. .29½ - —
l.c.l., works lb. .30½ - —
tanks, dlvd. lb. .27½ - —
Sebacate, dms., c.l., works lb. 1.27 - —
l.c.l., works lb. 1.28 - —
tanks, works lb. 1.25 - —
Sulphate, 55-gal., ret. dms., c.l., works lb .15 - —
l.c.l. works lb .16 - —
10-gal. ret. dms., l.c.l., works, lb. .16½ - —
Dimethylamine, 25-40%, dms., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .39½ - —
tanks, frt. equald lb. .33 - —
Dimethylaniline, dms., c.l., frt. alld. lb. .29½ - —
l.c.l., frt. alld lb. .30½ - —
tanks, frt. alld lb. .28½ - —
Dimethylethanolamine, anhydrous, dms., c.l., dlvd lb. 1.43 - —
l.c.l., dlvd. lb. 1.45 - —
tanks, dlvd. lb. 1.40 - —
70%, dms., c.l., dlvd., basis 100% lb. .55 - —
tanks, dlvd. lb. .53 - —
Dimethylformamide, dms., works lb. .34 - —
tanks, works lb. .33 - —
Dinitroaniline, dms., frt. equald lb. .57 - —
Dinitrobenzene, crude, dms lb. .20 - —
purified, dms lb. .22 - —
Dinitrochlorobenzene dms., c.l., frt. alld E lb. .15¼ - —
l.c.l., frt. alld. E lb. .15¾ - —
tanks, frt. allds., E lb. .15 - —
Dinitrophenol, bbls lb. .37 - —
Dinitrotoluene oily dms lb .10 - —
refined, dms lb .21 - —
Dioctyl adipate, dms., c.l., works lb. .46¾ - .47
l.c.l., works lb. .47¾ - .48
tanks, works lb. .44½ - .45
Phthalate, dms., c.l., frt. alld. lb. .36 - —
l.c.l., frt. alld lb. .37 - —
tanks, frt. allds lb. .34 - —
Sebacate, dms., c.l., works, dlvd. lb. .68½ - —
l.c.l., works, dlvd lb. .69½ - —
tanks, works, dlvd lb. .66½ - .67
Diorthotolylguanidin, dms., ton lots, dlvd. lb. .57 - —
smaller lots, dlvd lb. .58 - —
Dioxane, dms., c.l., works lb. .28¾ - —
l.c.l., same basis lb. .29¼ - —
tanks, same basis lb. .27 - —
Dip oil (see Tar acid oil).
Dipentaerythritol, bgs., c.l., works, gal. .34 - —
l.c.l., works lb. .37 - —
Dipentene, dest.-dist., dms., extra, c.l., works gal. .49 - —
l.c.l., works gal. .50 - —
ex-whse. gal. .68 - —
steam-dist., dms., c.l., works, South. gal. .68 - —
dlvd. N. Y gal. .57 - —
tanks, works, South gal. .55 - —
Diphenyl, bbls., c.l., works lb. .15 - —
l.c.l., works lb. .16 - —
Diphenyl in bags ¼c. lower.
Oxide, perfume grade, cns lb. .54 - .61
Phthalate, dms., c.l., works lb. .51¾ - —
l.c.l., works lb. .53¾ - —
Diphenylguanidin, dms., ton lots lb. .48 - —
smaller lots lb. .49 - .50
Diphenylhydantoin - sodium, USP, dms lb. 5.30 - 5.60
Dipropyleneglycol, dms., c.l., frt. alld lb. .16¾ - .17
l.c.l. same basis lb. .17¾ - .18
tanks, same basis lb. .15 - —
Methylether, dms., c.l., dlvd. E lb. .20¾ - —
l.c.l. same basis lb. .21¾ - —
tanks, same basis lb. .19¼ - —
Di-secondary-amylphenol, dms., c.l., works lb. .30¼ - —
l.c.l., works lb. .33¼ - —
tanks, works lb. .28¼ - —
Di-tertiary-amylphenol, dms., c.l., works lb. .30¼ - —
l.c.l., works lb. .33¼ - —
tanks, works lb. .28¼ - —
Di-tertiary-butylparacresol, dms., c.l., works lb. .91 - —
l.c.l., works lb. .95 - —
Divi-divi, 45% tannin, bgs., bls., c.l., U.S. ports, exdock ton. 70.00 - 72.00
Divinylbenzene, 20-25%, dms, c.l., works lb. .20 - —
l.c.l., works lb. .21 - —
tanks, works lb. .19 - —
40-50%, dms., c.l., works, basis 100% lb. 1.00 - —
l.c.l., works, basis 100% lb. 1.15 - —
Dodecylbenzene, dms., c.l., frt. equald lb. .14½ - —
l.c.l., same basis lb. .15½ - —
tanks, same basis lb. .12½ - —

Dyes, coaltar, certified colors for food drugs and cosmetics, 5-lb and 1-lb. lots dlvd.:—

Blue, FD & C, No. 1, cns	lb.	17.00	- 17.60
No. 2, cns	lb	17.00	- 17.60
Green, FD & C, No. 1, cns	lb	17.00	- 17.50
No. 2, cns	lb	22.20	- 22.85
No. 3, cns	lb	35.25	- 35.90
Orange, FD & C, No. 1, cns	lb.	3.65	- 3.75
No. 2, cns	lb	4.65	- 4.75
Red, FD&C, No. 2, cns	lb	7.55	- 7.85
No. 2, cns	lb	4.00	- 4.10
No. 3, cns	lb.	22.20	- 22.85
No. 4, cns	lb	7.20	- 7.50
No. 32 cns	lb	5.30	- 5.40
Violet, FD & C, No. 1, cns	lb.	17.00	- 17.60
Yellow FD&C, No. 1, cns	lb	10.50	- 11.05
No. 3, cns	lb.	3.30	- 3.40
No. 4, cns	lb	3.30	- 3.40
No. 5 cns	lb	4.00	- 4.10
No. 6, cns	lb	4.00	- 4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb lots, works, 25-50 lb. lots, dlvd.:—

Black, D&C, No. 1, cns	lb.	10.95	- —
Brown, D&C, No. 1, cns	lb	16.10	- —
Green, D&C, No. 5, cns	lb	16.10	- —
No. 6, cns	lb	16.10	- —
No. 7 cns	lb	14.80	- —
Orange, D&C, No. 3, cns	lb.	10.95	- —
No. 4, cns	lb	20.05	- —
No. 5, cns	lb.	5.70	- —
No. 10 cns	lb	20.70	- —
Red, D&C, No. 8, cns	lb	2.85	- —
No. 9, cns.	lb	2.85	- —
No. 10, cns.	lb	2.30	- —
No. 11, cns.	lb	1.85	- —
No. 12, cns.	lb	2.65	- —
No. 17 cns.	lb	10.95	- —
No. 18 cns.	lb	24.00	- —
No. 19 cns.	lb	15.45	- —
No. 21, cns.	lb	3.60	- —
No. 22, cns.	lb	10.95	- —
No. 28 cns.	lb	24.65	- —
No. 33 cns.	lb	17.45	- —
Violet, D&C, No. 2, cns	lb	16.10	- —
Yellow, D&C, No. 7, cns	lb	10.95	- —
No. 10, cns	lb	13.50	- —
No. 11, cns	lb	13.50	- —

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb lots, works, 25-50 lb. lots dlvd:—

Blue, Ext., D&C, No. 1, cns	lb	16.10	- —
Green Ext., D&C, No. 1 cns	lb	16.10	- —
Red Ext., D&C, No. 1, cns	lb.	13.50	- —
Yellow Ext. D&C, No. 1 cns	lb.	10.95	- —

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd., No.

20 Chrysoidine Y	lb.	.74	- —
27 Fast light orange 2G	lb.	.90	- —
31 Phloxine 2G	lb.	.74	- —
36 Yellow 2G	lb.	.83	- —
40 Orange R extra, conc	lb.	1.06	- —
57 Fuchsine 6B	lb.	1.08	- —
79 Scarlet 2R	lb.	.81	- —
151 Orange AD	lb.	.55	- —
161 Orange RR	lb.	.66	- —
176 Fast red A	lb.	.99	- —
179 Rubine XX, conc	lb.	1.14	- —
180 Blue F4B	lb.	.92	- —
185 Brilliant scarlet 3RN, conc.	lb.	.93	- —
202 Chrome blue black, conc	lb.	.75	- —
203 Chrome black T	lb.	.78	- —
208 Fast blue 5R	lb.	.91	- —
216 Chrome red B	lb.	.84	- —
234 Brown Y	lb.	.98	- —
246 Blue black, extra, conc	lb.	.95	- —
275 Milling red 3R, conc	lb.	2.03	- —
289 Navy blue 3R, conc	lb.	1.19	- —
299 Black F, conc	lb.	1.54	- —
304 Neutral black 2B, conc., 200%	lb.	2.01	- —
326 Fast scarlet 4BNC	lb.	1.64	- —
332 Bismarck, brown, RX, conc.	lb.	.95	- —
365 Brilliant yellow, conc	lb.	2.57	- —
382 Scarlet B	lb.	1.52	- —
401 Diazo black, BHD	lb.	.69	- —
406 Blue 2B, extra conc	lb.	1.07	- —
419 Red FC conc	lb.	1.12	- —
430 Brown M	lb.	.98	- —
448 Fed 4BX, conc	lb.	1.30	- —
518 Diamine sky blue FF, extra, conc	lb.	1.50	- —
561 Brown B	lb.	2.03	- —
581 Direct black EH	lb.	.94	- —
593 Green BY, conc	lb.	.72	- —
598 Yellow Brown R extra	lb.	.91	- —
620 Yellow 2G	lb.	1.01	- —
639 Fast yellow 2G	lb.	1.79	- —
640 Yellow XX	lb.	1.61	- —
655 Yellow OX	lb.	2.04	- —
657 Green V	lb.	2.10	- —

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd., No.
662 Brilliant green G ... lb. 2.79 - —
667 Brilliant milling green 6B, conc lb. 3.68 - —
671 Blue, EG ... lb. 1.70 - —
681 Crystal violet powder ... lb. 2.15 - —
698 Violet 4BXN ... lb. 1.74 - —
720 Brilliant blue, BBG ... lb. 1.88 - —
729 Blue B, conc ... lb. 2.79 - —
749 Red BX ... lb. 4.33 - —
814 Yellow, NN, Conc ... lb. 3.11 - —
841 Safranine GF, extra, conc.. lb. 3.17 - —
885 Nigrosine, WSJ ... lb. .75 - —
922 Blue GXX ... lb. 1.71 - —
978 Black GXCF conc ... lb. .52 - —
1034 Alizarine red SC ... lb. 2.59 - —
1054 Alizarine blue SAPX ... lb. 2.91 - —
1078 Alizarine green CG, extra, lb. 2.72 - —
1085 Alizarine blue, black, B lb. 2.33 - —
1096 Golden orange, GFD, single paste lb. 1.99 - —
1099 Dark blue BO, single paste, lb. 1.75 - —
1101 Jade green N, double paste, lb. 1.98 - —
1106 Blue RS double paste lb 2.96 - —
1113 Blue BLFD double paste lb. 2.25 - —
1150 Olive R single paste lb. 1.10 - —
1151 Brown R, single paste lb. 1.76 - —
1171 Indigo, synthetic, 20% paste lb. .31 - —
1217 Orange RD single paste lb. 1.65 - —
p-4 Brown, PG ... lb. 2.30 - —
p-24 Gray L ... lb. 1.60 - —
p-14 Brown, EB ... lb. 1.51 - —
p-80 Diazo brilliant scarlet ROAD lb. 2.79 - —
p-202 Diazo black VJ, conc lb. 1.74 - —
p-244 Brilliant scarlet BN ... lb. 1.51 - —
p-313 Naphthol SWF ... lb. 2.42 - —

Dyes, coaltar, for stains, oil-soluble, 100-lb dms., sellers' works.
Black blue No 550 ... lb. .81 - —
Jet No 551 ... lb. .89 - —
Brown R, conc ... lb. 1.72 - —
Orange R, brilliant ... lb. .90 - —
Red 4 B, conc ... lb. 1.37 - —
Yellow C ... lb. 1.18 - —
FN, conc ... lb. 1.22 - —

Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works:—
Auramine O ... lb. 1.85 - —
Black, basic blue ... lb 1.21 - —
Jet ... lb 1.21 - —
Blue, methylene, 2 B, conc lb. 1.71 - —
Brown Bismarck R, conc lb. .86 - —
Chrysoidine, R, extra ... lb. .92 - —
Y extra ... lb. .64 - —
Fuchsine, conc ... lb 3.08 - —

Dyes, coaltar, for stains, spirit-soluble, 100 lb. dms., sellers' works:
Green malachite, conc ... lb 2.10 - —
Rhodamine, B ... lb. 4.33 - —
Safranine Y conc ... lb 2.90 - —
Violet, methyl 6 ... lb 1.10 - —

Dyes, coaltar, for stains, water-soluble, 100-lb dms., sellers' works:
Azo rubine R extra conc lb 1.64 - —
Black, acid blue B, extra lb .86 - —
Fast light, 3 G, extra ... lb. 2.04 - —
Methanil conc ... lb .91 - —
Orange Acid, Y, conc ... lb .47 - —
Scarlet croceine MOO ... lb 1.45 - —
Yellow azo, conc ... lb .90 - —

Oil soluble, spirit-soluble, water soluble dyes in kegs, 3c. higher; tins, 10c. higher.

E

Echinacea root, bls ... lb. 1.25 - —
Egg albumen (see Albumen).
Yolk, dried, dom., bbls ... lb. 1.41 - 1.43
tanners, bbls ... lb. .06 - .06½
Elder flowers, bright, bls ... lb. .35 - .40
Elm bark, grinding, bls ... lb. No prices.
powd., bbls., bxs ... lb. .60 - —
select, bundles ... lb. .65 - —
Emetine hydrochloride, USP, bots. oz. 32.95 - 35.00
Ephedrine synthetic, USP, anhydrous bots., 100-oz. lots oz. .98 - 1.00
hydrous, bots., 100-oz lots oz. .92 - —
Hydrochloride, tin 100-oz. lots oz. .75 - —
Ephedrine sulphate, cryst., tins, 100-oz. lots oz. .72 - —
powd., tins, 100-oz lots oz. .73 - —
Epichlorohydrin, dms., c.l., works lb. .39 - —
l.c.l., works ... lb. .40 - —
tanks, works ... lb. .37 - —
Epinephrine, synth USP, bots., 100 gram lots gram. .45 - .55
Epsom salt, tech, bgs., c.l., works, 100 lbs 2.15 - —
l.c.l., works ... 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal 100 lbs 3.10 - —
smaller lots ... 100 lbs. 3.35 - —
Ergosterol, unirradiated, cryst kilo 150.00 - —
Ergot, NF, dms., tin-lined ... lb. 3.25 - 3.50
Eserine bots ... oz. 45.00 - 50.00
Salicylate, bots ... oz. 29.75 - 32.50
Sulphate, bots ... oz. 34.50 - 35.61
Ether acetate (see Ethyl acetate).
Butyl, dms., c.l., works ... lb. .31½ - —
l.c.l., works ... lb. .32 - —
tanks, works ... lb. .30 - —
Butyric (see Ethyl butyrate).
Dichloroethyl, refd., dms., c.l., dlvd. E lb. .14 - .14½
l.c.l., same basis ... lb. .15 - .16
tanks, same basis ... lb .13 - —
technical, dms., c.l., works lb. .13 - —
l.c.l., works ... lb. .13¼ - —
tanks works ... lb. .12 - —
Ethyl, absolute, ACS, dms ... lb. .37 - —
anesthesia USP hospitals, 1-lb. cns lb. .89 - —
½-lb. cns ... lb. .97 - —
¼-lb. cns ... lb. 1.05 - —
solvent, USP, dms., c.l., dlvd lb. .15¾ - —
l.c.l. same basis ... lb. .16¾ - —
tanks, same basis ... lb. .13¾ - —
Ether, ethyl, synthetic, dms., c.l., dlvd. E lb. .12 - —
l.c.l., same basis ... lb. .13 - —
tanks, same basis ... lb. .10 - —
Isopropyl, dms., c.l., dlvd ... lb. .07 - —
l.c.l., dlvd. ... lb. .08 - —
tanks, dlvd ... lb. .05 - —
Nitrous, conc., bots., 100-lb lots. lb. 1.29 - 1.33
Vinyl, USP, anesthesia, bots. 50 cc. hospitals bot. 1.12 - —
75 cc. hospitals bot. 1.56 - —
Ethyl acetate, natural fermentation 85-88%, dms., c.l., frt. alld. lb. .13 - —
l.c.l., frt. alld ... lb. .14 - —
tanks, frt alld lb. .11 - —
95-96%, dms., c.l., frt. alld. lb. .13¾ - —
l.c.l., frt. alld. ... lb. .14¼ - —
tanks frt alld ... lb. .11¼ - —
99%, dms., c.l., frt. alld lb. .13½ - —
l.c.l., frt alld. ... lb. .14½ - —
tanks, frt alld ... lb. .11½ - —

Ethyl aceate, synthetic, 85-98%, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd. ... lb. .14 - —
tanks, dlvd ... lb. .11 - —
95-98%, dms., c.l., dlvd ... lb. .13¼ - —
l.c.l., dlvd. ... lb. .14¼ - —
tanks, dlvd ... lb. .11¼ - —
99%, dms, c.l., dlvd ... lb. .13½ - —
l.c.l., dlvd. ... lb. .14½ - —
tanks dlvd ... lb. .11½ - —
Acetoacetate, dms., c.l., dlvd. lb. .55 - —
l.c.l., dlvd lb. .56½ - —
Acrylate, dms., c.l., and truck load, works lb. .45½ - —
less than truckload, works lb. .46 - —
tanks, works ... lb. .42¾ - —
Aminobenzoate, USP (see Benzocaine).
Benzoate, cns., dms. ... lb. .74 - .90
Bromide tech., 98%, dms., c.l lb. .41 - —
l.c.l. ... lb. .43 - —
Butyrate works ... lb .80 1.02
Carbamate (see Urethane).
Chloride, tech., cyl., c.l., works. lb. .20 - .22
dms., c.l. same basis ... lb. .18 - .20
tanks, same basis ... lb .10 - —
Chloride, USP, bbls., cyls ... lb. .22 - .24
Cinnamate, cns ... lb. 2.71 - 3.45
Formate dms ... lb .60 - —
Gallate, dms., 100 to 2,000-lb lots lb 3.90 4.40
Iodide, cbys., works ... lb 3.30 - —
Methacrylate, dms., c.l., and less than truckload works lb .50½ - —
Nitrite (see Ether nitrous).
Oenanthate, dms. ... lb. 1.00 - 1.50
Oleate, dms, l.c.l., works lb. No prices.
Oxalate (see Diethyl oxalate)
Silicate dist. (see Tetraethylorthosilicate).
40% available SiO, dms, works. lb. .54½ - —

Ethylalphanaphthylamine (see monoethylalphanaphthylamine).
Ethylamine (see Mono, Di- or Tri-)
Ethylanilin (see Monoethylanilin).
Ethylbenzene, 99%, dms., c.l.... lb. .19½ - .20¼
l.c.l. ... lb. .20½ - .21¼
tanks ... lb. .18½ - —
Ethylbutylketone, dms., c.l., works. lb. .35½ - —
l.c.l., works ... lb. .36 - —
tanks ... lb. .34 - —
Ethylcellulose, vis. 7 cps, bgs., 5,000 lb. lots or more, works lb. .70 - —
smaller lots, works lb. .72 - .80
vis., 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, works lb. .65 - —
smaller lots ... lb. .67 - .73
Ethylene dichloride, dms., c.l., dlvd lb. .10¼ - —
l.c.l., same basis ... lb. .12¼ - —
tanks, same basis ... lb. .09 - —
Ethylene dichloride prices W of Rockies 1c per lb higher
Oxide, dms., c.l., dlvd. ... lb. .20½ - —
l.c.l., dlvd. ... lb. .23½ - —
tanks, dlvd. ... lb. .16¼ - —
Trichloride (see Trichloroethane).
Ethylenediamine 85-88%, dms., c.l., dlvd E., basis 100% lb. .48 - —
l.c.l. dlvd. E., basis 100% lb. .47 - —
tanks, dlvd. E., basis 100% lb. .44 - —
Ethyleneglycol, dms. c.l., dlvd E. lb. .16¼ - —
l.c.l., same basis ... lb. .17¼ - —
tanks, same basis ... lb. .14½ - —
Monobutylether, dms., c.l., dlvd. E lb. .20 - —
l.c.l. dlvd E ... lb. .21 - —
tanks, dlvd. E ... lb. .18½ - —

Dyes, Coaltar, Gen'l Use, No. 662—Feldspar

Ethyleneglycol monoethylether, dms., c.l., dlvd. E ... lb. .20 - —
l.c.l., dlvd. E ... lb. .21 - —
tanks, dlvd. E ... lb. .18½ - —
Acetate, dms., c.l., dlvd. E ... lb. .18½ - —
l.c.l., dlvd. E ... lb. .19½ - —
tanks, dlvd. E ... lb. .16½ - —
Monomethylether, dms., c.l., dlvd. E ... lb. .20 - —
l.c.l., dlvd E ... lb. .21 - —
tanks, dlvd E ... lb. .18½ - —
Acetate, dms., c.l., dlvd. E ... lb. .28¾ - —
l.c.l. dlvd E ... lb .29¼ - —
tanks dlvd E ... lb. .27 - —
Monostearate, triple pressed, dms. lb. .31 - .33
Ethylethanolamines mixed, dms., c.l., frt. alld., E. Miss. lb. .44 - —
l.c.l. same basis ... lb. .45 - —
tanks, same basis ... lb. .42 - —
Ethylmorphine hydrochloride, USP bots oz. 2.85 - —
Ethylorthotoluidin (see Monoethylorthotoluidin)
Ethylvanillin cns, 25-lb lots lb 6.75 7.50
smaller lots ... lb 7.35 7.40
Eucalyptol, USP, cns., dms ... lb. 1.40 - 1.50
Eugenol, USP, bots ... lb. 2.40 - 3.15
Euphorbia herb, bls. ... lb. .13 - .15

F

Feldspar, enamel, 100 mesh, bgs., works ton 30.00 - 32.00
Glass 20 mesh bulk, tons, works ton 11.75 - 12.50
Pottery bgs ton lots works ton 20.00 - 22.00
bulk, c.l., works ... ton 18.00 - 20.00

"Washable paint... I hope!"

To step up washability of your paints, formulate with U.S.I. AROFLAT® alkyds. Either Aroflat 3025 for top quality flats with excellent color retention and flexibility — or Aroflat 3050 for high grade flats with maximum economy.

Flat paints produced with Aroflat resins have exceptionally good washability. Hold-out properties are excellent, solvent release is relatively slow, so that highly satisfactory lapping properties are obtained.

Both Aroflat 3025 and 3050 are available in *odorless* or regular solvents. They *brush easily*, with *good leveling*. These resins have good compatibility with other materials.

Formulate your flat wall finishes, eggshell wall finishes, semi-gloss finishes, odorless wall finishes, and wall primers and undercoaters with U.S.I. AROFLAT resins.

Specifications

	AROFLAT 3025-P	AROFLAT 3050-ML
Nonvolatile	39-41%	39-41%
Solvent	Petroleum Spirits	Low Odor M.S.
Viscosity G.H.	J-P	P-W
Acid No. of Nonvolatile	5-10	5-10
Color (Gardner Std. '33)	10	10
Wt. per gallon at 25°C.	7.15-7.25	7.2-7.3

Also available — Aroflat 3025-MO and 3050-MO in *odorless* mineral spirits. All offered in tanks or drums.

For full information on the complete alkyd line, call or write U.S.I. — first with complete flat vehicles, first with alkyds in odorless solvents and first with a complete alkyd line.

FREE REPRINTS of the cartoon portion of this advertisement are available. If you'd like some, write us on your letterhead.

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers Products Corporation
120 Broadway, New York 5, N. Y.
Branches in all Principal Cities

Fennel Seed—Lead Tallate

Fennel seed, Argentine, bgs. lb. .11 - .12
Czech, medium, bgs. lb. .11 - .12
Levant, light, bgs. lb. .14 - —
Indian, light, bgs. lb. .11½- —
Fenugreek seed, Moroccan, bgs. lb. .07 - —
Ferric-ammonium citrate (see Iron ammonium citrate).
Ferric cacodylate (see Iron cacodylate).
Glycerophosphate (see Iron glycerophosphate).
Hypophosphite (see Iron hypophosphite)
Sulphate (see Iron sulphate ferric).
Ferrous gluconate, NF, dms. lb. .68 - .87
Fir balsam, Canada, cns. gal. 34.00 -35.00
Oregon, bbls. gal. No prices.
Fishliver oil (see Oil fishliver).
Fishmeal, menhaden, ground, domestic, 60% protein, bags, Balto area ton. 136.00 - —
Fishscrap, menhaden, dried, 60% protein, bags, Balto area ton. 130.00 -131.00
Fluorspar, dom., acid grade, bulk, c.l., mine ton. 60.00 - —
ceramic grade, 93-96% CaF_2, grd., bulk, c.l., mine ton. 57.50 - —
85-92% CaF_2, grad., bulk, c.l., mine ton. 47.00 - —
metallurgical grade, briquets, pellets, 65%, CaF_2, bulk, c.l., mine ton. 34.00 - —
lump, 59-65% effective CaF_2, bulk, c.l., mine ton. 40.00 - —
washed gravel, 59-60% effective CaF_2, bulk, c.l., mine ton. 40.00 - —
60-65% effective CaF_2, bulk, c.l., mine ton. 40.00 -41.00
65-70% effective CaF_2, bulk, c.l., mine ton. 42.00 - —
70% or better, effective CaF_2, bulk, c.l., mine ton. 43.00 - —
Formaldehyde, NF, (inhibited), dms., c.l., works, E lb. .066 - —
l.c.l., works E lb. .071 - —
tanks, works E lb. .0420- —
methanol-free (uninhibited), tanks, works lb. .0395- —

Tankcar and tankwagon prices above are on a delivered basis in New England Eastern New York, N. J. Eastern Penna. and part of Delaware. In states other than Eastern Seaboard as well as west of Rockies, prices f.o.b. Texas plants are .0270 for inhibited and .0245 for uninhibited

Fleaseed (see Psyllium seed).
Frangetree bark, bls lb. .60 - .81
Fuller's earth, dom., powd., bgs., c.l., Fla., mines ton. 21.25 - —
Georgia mines, c.l. ton. 17.00 -18.00
Illinois mines, c.l. ton. 16.00 - —
Texas mines, c.l. ton. 16.00 - —
spent, f.o.b. shipt. pt., c.l. ton. 4.50 - 5.00
imported, bgs., c.l. ton. 42.00 - —
Furfural, tech., dms., c.l., works lb. .13 - —
l.c.l., works lb. .14 - —
tanks, works lb. .115 - —
Fusel oil, refined, dms., c.l., dlvd lb. .17½- —
l.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. .15 - 15½
Fustic extract, cryst., No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls., l.c.l lb. .45½- —
No. 3, bbls, l.c.l lb. .43½- —
liquid, No 1, bulk., l.c.l lb. .22½- —
No. 2, bbls., l.c.l lb. .21½- —
No. 3, bbls., l.c.l lb. .19 - —
solid, No. 1, bxs., l.c.l. lb. .45 - —

G

G salt, 100% basis, bbls., frt. alld lb. .73 - —
Gammapicoline, 98% dms., c.l., works lb. 2.65 - —
Gasoline, tanks, refy., ex Ft. Arkansas, 84 octane gal. .115 - —
Group 3, 84 octane gal. .11 - .11375
Gulf coast, 83 octane gal. .105 - .11375
N. Y. Harbor, 86 octane gal. .1365- .145
Penn., western N. Y. or 86 octane gal. .1375- .1415
natural, group 3, 26-70 octane gal. .055 - —
Gelatin, edible, pure (pork skin), 75 Bloom test, fib dms., c.l lb. .52 - —
150 Bloom test, fib dms., c.l. lb. .63 - —
200 Bloom test, fib dms., c.l. lb. .69 - —
225 Bloom test, fib dms., c.l. lb. .72 - —
275 Bloom test, fib dms., c.l. lb. .79 - —
Gelsemium root, bls lb. .28 - .29
Gentian root, bls lb. .17 - .20
grd., bbls., bxs lb. .22 - .23
powd., bbls., bxs lb. .23 - .24
Geraniol, extra, cns., dms lb. 1.90 - 2.20
standard, cns., dms lb. .60 - 1.75
Geranyl acetate, cns lb. 1.45 - 2.20
Ginger, oleoresin, NF, from African root, bbls lb. 4.00 - 7.75
from Jamaican root, bbls lb. 6.00 -10.25
Root, African, bls lb. .15 - —
Jamaica, No. 1, bgs lb. .19 - .20
No. 2, bgs lb. .17 - —
No. 3, bgs lb. .16½- —
Rhattoon, bgs lb. .16 - —
Nigerian, split, bgs lb. .14½- —
Glauber's salt, anhyd see Sodium sulphate)
Glue, bone, extracted, 66 jellygrams, bgs., c.l., dlvd lb. .22½- —
66 jellygrams, same basis lb. .23 - —
104 jellygrams, same basis lb. .23½- —
131 jellygrams, same basis lb. .24 - —
164 jellygrams, same basis lb. .24½- —
191 jellygrams, same basis lb. .25 - —
222 jellygrams, same basis lb. .26 - —
packers' 40 jellygrams, bgs., c.l., dlvd lb. .18½- —
65 jellygrams, same basis lb. .19½- —
86 jellygrams, same basis lb. .20 - —
115 jellygrams, same basis lb. .20½- —
135 jellygrams, same basis lb. .21½- —
164 jellygrams, same basis lb. .22 - —
renderers' 110 jellygrams, bgs., c.l., dlvd lb. .20 - —

Bone glue, l.c.l., prices 1c. higher.

hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .22 - —
95-121, bgs., c.l., dlvd lb. .22½- —
122-149 bgs., c.l., dlvd lb. .24 - —
150-177 bgs., c.l., dlvd lb. .26 - —
178-206, bgs., c.l., dlvd lb. .28 - —
207-236, bgs., c.l., dlvd lb. .32 - —
237-266, bgs., c.l., dlvd lb. .33½- —
237-266, bgs., c.l., dlvd lb. .33½- —
299-330, bgs., c.l., dlvd lb. .35 - —
331-362, bgs., c.l., dlvd lb. .36 - —
363-394, bgs., c.l., dlvd lb. .37 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .40 - —
461-494, bgs., c.l., dlvd lb. .42 - —
495-529, bgs., c.l., dlvd lb. .44 - —

Hide glue l.c.l. prices 1c. higher.

Glycerin, nat. crude, saponification, 98%, to refineries, tanks, dlvd. lb. .21½- —
soaplye, 80%, tanks, dlvd lb. .19¼- —
refined, BP, 96%, dms., c.l., dlvd. lb. .24½- —
l.c.l., dlvd lb. .25 - —
tanks, dlvd lb. .24 - —
dynamite, dms., c.l., dlvd lb. .24½- —
l.c.l., dlvd lb. .25 - —
tanks, dlvd lb. .24 - —
high gravity, dms., c.l., dlvd. lb. .24½- —
l.c.l., dlvd lb. .25 - —
tanks, dlvd lb. .24 - —
USP, CP, 95%, dms., c.l., dlvd. lb. .23½- —
l.c.l., dlvd lb. .24 - —
tanks, dlvd lb. .23 - —
yellow, distilled, dms., c.l., dlvd. lb. .24 - —
l.c.l., dlvd lb. .24½- —
synth., dms., c.l., dlvd lb. .24½- —
l.c.l., dlvd lb. .25 - —
tanks, dlvd lb. .24 - —
Glycine (see Acid aminoacetic).
Glyoxal, 30% dms. c.l. works lb. .18½- —
l.c.l. works lb. .19 - —
tanks, works lb. .18 - —
Gold chloride, acid-brown, bots oz. 22.50 -23.00
acid-yellow, bots oz. 20.50 -20.50
Golden seal root, NF, tested, b's lb. 2.25 - 2.50
powd., bxs lb. 2.75 - 3.25
Graphite, amorph., powd., bgs., fib. dms. ex whse lb. .06 - .09½
crystalline, 80-90%, powd., bgs., fib dms., ex whse lb. .19 - .21½
90-92%, powd., bgs., fib dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95%, bgs., fib dms., ex whse lb. .29 - 31
Grease, brown, tanks, dlvd lb. .05¾- —
house, tanks, dlvd lb. .06¾- —
white, choice, not all hog, tanks, dlvd lb. .06½- —
yellow, tanks, dlvd lb. .06¾- —
Green, brilliant, thioflavin, toner, molybdated PMA kgs. works lb 5.10 - —
tungstated PTMA kgs. works lb. 6.20 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., dlvd, N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .38 - —
16-30%, bbls., same basis. lb. .39 - —
31-45%, bbls., same basis. lb .40 - —
45-49%, bbls., same basis. lb. .43 - —
50%, bbls. same basis lb. .48 - —
reduced color, 25%, bbls., same basis lb. .19 - —

Chrome green prices are ½c. higher, dlvd., at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Chromium oxide, hydrated, bbls., dms., c.l., frt. alld lb. 1.00 - 1.10
pure, bgs., c.l., frt. alld lb .39¼- —
l.c.l., same basis lb. .39¾- —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb 4.80 - —
Paris (see Paris green).
Phthalocyanin toner, bbls., works lb. 3.95 - —
resinated, bbls lb. 3.50 - —
water dispersable, bbls lb. 1.71 - —
Pigment B, kegs lb. 1.35 - —
Grindelia robusta herb, bls lb. .44 - —
Guaiacol, cryst., NF, dms., tins lb. 2.10 - 2.15
liquid, NF, dms., cbys lb. 2.30 - 2.40
Carbonate, NF VII, dms lb. 3.40 - 3.45
Gum, accroides (see Gum, yacca).
Aloe (see A).
Arabic, amber, sorts, bgs lb. .15½- 16
powdered, USP, bbls lb. .20 - .23
Asafetida (see A).
Asphaltum (see A)
Benzoin, Sumatra, cs lb. .38 - .42
Camphor (see C)
Cellulose, bgs., 23,000-lb. lots or more works, frt alld lb. .60 - —
smaller lots, same basis lb. .62 - —
Copal, Congo, No. 1, bgs lb. .19 - .20
No. 2, bgs lb. .16 - .18
No. 3, bgs lb. .14½- .16½
Manila, C, bgs lb. .35 - .38
CBB, bgs lb. .23 - .25
DBB, bgs lb. .21 - .24
DK, bgs lb. .15 - .18
dust, bgs lb. .11 - .12½
soft, MA, bgs lb. .15 - .18
WS, bgs lb. .27 - .35
Philippine, pale, chips, bgs lb. .19 - .24
nubs, bgs lb. .29 - .32
seeds, bgs lb. .15 - .17
sorts, bgs lb. .16 - .17
Pontianak, chips, bgs lb. .20 - .22
nubs, bgs lb. .30 - .32
Dammar, Batavia, A/E, cs lb. .28 - .29
dust, bgs lb. .16 - .18
E, bgs lb. .20 - .22
East India, batu, bold, bgs lb. .14½- .15½
nubs and chips, bgs lb. .08½- .09½
black, bold, bgs lb. .14½- .16
unscraped, bgs lb. .11 - .13
nubs and chips, bgs lb. .11 - .13
pale, chips, bgs lb. .13 - .14
nubs, bgs lb. .18 - .20
Singapore, No. 1, bgs lb. .38 - .40
No. 2, bgs lb. .28 - .30
No. 3, bgs lb. .16 - .17
dust, bgs lb. .16½- .17
seeds, bgs lb. .20 - .22
Ester, gum-rosin type, dms., c.l., dlvd, Ill., Ind., Ky., Mich., Mid-Atl. States, N.E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .16 - .16½
wood-rosin type, dms., c.l., same basis lb. .15½- —
Karaya, NF powd., No. 1, bbls lb. .30 - .35
No. 2, bbls lb .24 - .28
No. 3, bbls lb. .20 - —
Kauri, bgs lb. .30 - .50
Locust bean, powd., bgs lb. .30 - .32
Myrrh, cs. lb. .38 - .40
Opium (see O).
Olibanum siftings, cs lb. .15 - .20
tears, cs. lb. .22 - .30
Red (see Gum, yacca).
Rosin (see R).
Sterculia (see Gum karaya).
Tragacanth, No. 1, cs. lb. 2.85 - 2.90
No. 2, cs lb 2.45 - 2.50
No. 3, cs lb 1.60 - 1.70
powdered, USP, bbls lb 1.25 - 1.35
Yacca, bgs lb. .06 - .09
Gypsum, plaster of paris, 100-lb. paper bags, trucks, dlvd. N. Y. C ton. 20.30 - —
Terra alba, domestic, same basis. ton. 19.00 - —
works, N. Y. C. ton. 16.00 - —
imported, English, 100-lb. paper bags, ex dock, N. Y. C. ton 55.00 - —
ex warehouse ton. 60.00 -62.00

H

Hawthorn berries, bgs. lb 28 - .32
Heliotropine, cryst., cns lb. 3.25 - 3.75
Hellebore root dom green, bls lb. .55 - .65
Helonias root, bls lb. 1.75 - 2.00
Hematine extract, cryst., No. 1, bbls. l.c.l lb 47 - —
No 2, bbls. l.c.l lb 43 - —
No 3, bbls. l.c.l lb 41 - —
No 4, bbls. l.c.l lb. .39 - —
No 5, bbls. l.c.l lb .37 - —
paste, No 1 bbls. l.c.l lb 20½- —
Henbane leaves, bls lb. .40 - .45
Heptane, industrial, tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .14¾- —
Borger, Tex gal. .14¾- —
Hesperidin methyl chalcone, bots. works lb 50.00 - —
Hexachlorophene, dms lb 2.60 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 1,000 lb lots or more, Perth Amboy or N. Y. C. lb. .239 - —
smaller lots, same basis lb. .242 - —
fib dms. 1,000 lb lots or more, same basis lb .239 - —
smaller lots, same basis lb. .249 - —
USP, dms., 500 lb lots or more, same basis lb .401½- —
smaller lots, same basis lb. .41½- —
Hexamine (see Hexamethylenetetramine).
Hexane industrial, tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15½- —
Borger, Tex gal. .15½- —
Hexanol, normal dms., c.l., works. lb. .34½- —
l.c.l., works lb. .35 - —
tanks, works lb. .33 - —
Hexyl cinnamic aldehyde, dms lb 2.25 - 7.50
Salicylate dms lb 1.75 - —
Hexyleneglycol, dms., c.l., dlvd lb. .16 - —
l.c.l., dlvd lb. .17 - —
tanks dlvd lb. .14 - —
Hexylmethacrylate, normal, dms., less than truckload, works lb .71 - —
Hexylresorcinol, USP, dms., 50-lb. lots or more, dlvd lb. 14.00 - —
smaller lots, dlvd. lb. 14.50 - —
Histidine diphosphate USP, bots kilo 454.00 - —
Histidine hydrochloride, laevo, NF, 6b dms, 50-kilo lots, works kilo 80.00 -85.00
1-5 kilo lots, works kilo. 90.00 -95.00
Homatropine hydrobromide, USP bots oz. 9.35 - 9.45
Hydrochloride, bots. oz. 20.00 -22.00
Methylbromide, USP, bots oz. 10.00 11.00
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton. 6.75 - —
Horehound herb, bls. lb. .16 - .19
Hydrastine bots oz. 29.50 -31.00
Hydrochloride, NF bots oz. 29.50 -31.00
Sulphate bots oz. 35.00 -37.00
Hydrastinine 10-grain hots bot 1.95 —
Hydrastis (see Goldenseal).
Hydrazine, free base, ret. dms., Niagara Falls lb 3.00 - 3.30
Hydrate 100% ret dms Niagara Falls lb 1.75 - 1.95
85% ret. dms., same basis lb. 1.35 - 1.55
Hydrobromide dms. fib cms., works lb .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyl., c.l., works lb. .45 - —
l.c.l., works lb. .55 - .60
Fluoride, anhyd., cyls., works lb. .27½- .29
tanks, works lb. .21 - —
Peroxide USP bbls dlvd lb 03¾ 05
35% cbys., dlvd lb. .228 - —
dms., c.l., dlvd lb. .209 - —
l.c.l., dlvd. lb. .213 - —
tanks, dlvd lb. .201 - —
Hydroquinone photo grade bbls. dms. lb 98 - 1.00
tech. dms., c.l. frt. equald lb 77 - —
l.c.l. frt equald lb 78 - —
Hydroxycitronellal, cns lb 5.35 - 5.80
Hyoscine salts (see Scopolamine)
Hyoscyamine, bots oz 15.75 - 16.00
Hydrobromide, bots oz 16.50 - 18.00
Sulphate bots oz 12.00 -13.50
bbls., l.c.l lb .32 - —
liquid No 1, bbls. l.c.l lb 35 - —
No 2 bbls. l.c.l lb 27 - —
Hypernic extract, cryst., No. 2,

I

Ichthammol, NF, dms lb. .60 - .75
Indian red (see Red, Indian).
Indigo (see Dyes, coaltar, 1171 indigo synthetic).
Indol CP bots lb 17.00 -21.00
Inositol, bots., dlvd lb 5.00 - —
dms., dlvd. lb 4.50 - 4.75
Insect flowers (see Pyrethrum)
Iodine, crude kgs lb 1.30 - —
resublimed, USP, bots., jars lb 2.55 - —
Iodochlorohydroxyquin USP, dms lb 3.90 - —
Iodoform NF dms., kgs lb 4.90 5.00
Ionone alpha cns lb 4.00 8.25
Beta cns lb 4.30 11.25
Methyl, std., dms., cns. lb 3.80 4.65
Ipecac root, bgs lb 6.25 - 6.50
powd., bbls., bxs lb. 6.75 - 7.00
Irish moss bleached, prime, bls lb .30 - .35
Iron acetate liquor 25° bbls. c.l., works lb .09 - —
l.c.l., works lb .09¾- —
solut. USP IX cbys lb 16 - —
dms lb 17 - —
Cacodylate NF bots lb 13.00 -14.00
Chloride (ferric), anhyd., tech., dms. c.l. works 100 lbs. 6.75 - —
l.c.l., works 100 lbs. 8.00 - —
indust., cryst., bbls., c.l., works 100 lbs. 4.75 - 5.25
l.c.l., works 100 lbs. 5.25 - 5.25
42° Be, cbys., c.l., works lb. 7.25 - 8.25
tanks, frt. equald., basis 100% 100 lbs. 3.20 - —
USP, cryst., dms., works lb. .07½- .09
Citrate, gran., dms lb. .86 - —
Gluconate, NF (see Ferrous gluconate, NF)
Glycerophosphate, NF, powd lb 4.75 - 4.85
Hypophosphite, NF, dms lb. 2.80 - —
Iodide, bgs. lb. 3.66 - 3.73
Naphthenate liq., 6% Fe., dms., frt. alld lb. .25¾- —
Oxalate gran dms lb .85 - .87
Phosphate, NF, soluble, gran., pearls lb .64 - .65
Pyrophosphate, NF VII, soluble, gran., pearls dms lb. .78 - .81
Iron resinate, 6.75% Fe, dms., frt. alld lb. .26¼- —
Stearate dms., c.l., frt. alld lb. .37 - —
l.c.l., same basis lb. .38 - .42
Sulphate ferric, partially hydrated, bgs., c.l., works ton. 31.75 -33.75
l.c.l., works ton. 34.75 -40.75
ferrous, tech. (see Copperas).
USP, cryst., bbls., dms lb. .09½- .10
Iron-ammonium citrate, brown, N.F., gran., dms lb. .59 - —
green, USP XII, gran., dms lb. .59 - —
Oxalate, fine gran., dms lb. .25½- .28½
Iron-potassium, oxalate, fine gran., dms lb. .30½- .33½
Iron-sodium oxalate, fine gran., dms lb. .25½- .28½
Isoborneol, cns lb. 1.25 - 1.70
Isobornyl acetate, cns lb. .35 - .95
formate dms. lb. .80 - —
Propionate, dms lb. 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. .75 - 1.00
solvent grade dms., c.l. dlvd E. of Rockies lb. .13¼- —
l.c.l., same basis lb. .14¼- —
tanks, same nasis lb. .11¼- —
Methacrylate, dms., works lb. .60 - —
Isobutyraldehyde, dms., dlvd lb. .50 - —
Isoeugenol, cns lb. 3.40 - 4.05
Isoniazid, bulk, powder, 25-kilo lots or more kilo. 23.00 -31.00
smaller lots kilo. 24.00 -32.00
Isopentane, commercial grade, non-ret. dms., f.o.b. Tex. refy gal. .50 - —
pure lb. .50 - —
tech. lb. .25 - —
Isonicotinic acid hydrazide (see Isoniazid).
Isophorone dms. c.l., works lb. .24¼- —
l.c.l. works lb. .24¾- —
tanks, works lb. .22½- —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate dms., c.l., dlvd, lb. .12 - —
l.c.l., same basis lb. .13 - —
tanks, same basis lb. .10 - —
Alcohol (see Alcohol, isopropyl).
Benzene (see Cumene)
Ether (see Ether isopropyl).
Isopropylamine (see Mono, Di, or Tri-)
Isopropylphenol, dms., c.l., works lb. .46 - —
l.c.l. works lb. .47 - —
tanks, works lb. .45 - —
Isoquinolin, dms., works lb. .65 1.25

J

Jalap root, NF, bls lb. .38 - .55
powd., bbls., bxs lb. .49 - .66
Juniper berries, bgs lb. .16 - .18
Tar, NF, dms lb. .42 - .60

K

Kaolin (see also Clay, China).
NF, powd. fib dms lb. .08 .16½
colloidal fib dms lb. .15 .15½
Kerosene, tanks, refy., Ark., 42-44 specific gravity, w.w gal. .09375- —
California, 40-43 s.g., w.w gal. .138 - .148
Gulf ports, 41-43 s.g., w.w. gal. .09125- .0975
N. Y. Harbor, 43-44 s.g. w.w. gal. .106 - —
Okla.-Tex., 41-43 s.g. w.w gal. .08875- .10
Penn., Western, 43 s.g., w.w. gal. .1125- .1185
Kola nuts, bgs lb. .12 - —

L

Lady's slipper root, bls lb 1.70 - 1.75
Lanolin, cosmetic, dms., works lb. .35½- .40½
USP, anhydrous, dms., works lb. .34 - —
hydrous, dms., works lb. .33 - —
Lard, cash, trcs., Chicago lb. .1700- —
Larkspur seed, bgs. lb. .20 - .25
Lauryl chloride, distilled, dms., c.l., works, frt. equald lb. .74 - —
l.c.l. lb. .75 - —
Methacrylate, normal, dms., c.l. or truckload lb. .65½- —
Lavender flowers, medium, bls lb .55 .60
ordinary, bls lb. .16 .20
select, bls lb .90 —
Lead acetate, white, crystals, bbls. gran bbls. lb. .22 - —
gran. bbls lb. .23 - —
powd., bbls lb. .23 - —
NF cryst., gran. powd lb. .31 .33
Arsenate acid powder, dealers, 3-lb bgs., or larger, c.l., frt. alld. on 96 lbs or more lb. .27½- —
l.c.l., frt alld lb. .28½- —
1-lb bgs., c.l. lb. .41½- —
l.c.l. lb. .42½- —
Blue, basic sulphate, bbls., c.l., ship't point, frt. alld lb. .14¾- —
l.c.l., same basis lb. .15¾- —
Carbonate (see Lead, white).
Chloride dms lb. .45 - —
Iodide, NF V jars lb. 3.82 - —
Linoleate, fused, 26.5%, dms lb. .32½- —
Metal, pigs, prime, N. Y. lb. .13 - —
St Louis lb. .1280- —
Metallic paste, dms., 20,000-40,000-lb. lots, same basis lb. .32¼- —
10,000-20,000-lb. lots same basis lb. .33¼- —
2,000-10,000-lb. lots, same basis lb. .33¾- —
200-2,000-lb. lots, same basis. lb. .34¼- —

Prices ex whse. Jersey City, N. J., 4½c. per lb. higher.

Monosilicate, bgs., c.l., works, frt. equald lb. .1410- —
l.c.l., same basis lb. .1460- —
Naphthenate, liquid, 16% Pb, dms., dlvd lb. .17½- —
24% Pb. dms., dlvd lb. .23¾- —
solid, 37% Pb. dms., dlvd lb. .31¼- —
Nitrate, bbls lb. .22¼- —
Oleate, fused, bbls. lb. .29¾- —
Orthosilicate gel, 50% PbO, dms., works lb. .32¾- —
60% PbO dms. works lb 31¼- —
Peroxide, powd., tech., bbls lb. .45 - .47
Phthalate, dibasic, dms., works. lb. .41 - —
Red, 95% Pb_3O_4, or less, bbls., c.l., works, frt. equald lb. .16 - —
l.c.l., same basis lb. .15¾- —
97% Pb_3O_4, bbls., c.l., same basis lb. .16¾- —
l.c.l., same basis lb. .16¼- —
98% Pb_3O_4, bbls., c.l., same basis lb. .16 - —
l.c.l., same basis lb. .16½- —
Resinate, precip., dms., dlvd lb. .28½- —
Salicylate, normal dms. works lb 46 - —
Stearate, dibasic, ton lots lb. .54 - —
precip., bbls., c.l. lb. .39 - —
l.c.l. lb. .40 - .44
Sulphate (see Lead, blue, basic sulphate).
Lead, white; basic sulphate).
Tallate, liquid, 16% Pb, dms. lb. .16 - —
24% Pb. dms. lb. .21½- —

Lead, white, basic carbonate, bgs., c.l., ship't. point, frt. alld. lb. .16 - —
l.c.l., same basis lb. .17 - —
basic silicate, bgs., c.l., ship't point, frt. alld lb. .15¼- .17¾
l.c.l., same basis lb. .16¼- .18¾
basic sulphate, bgs., c.l., ship't point, frt. alld lb. .14¾- —
l.c.l., same basis lb. .15¾- —
Lecithin, edible, tech., bleached, non-ret., dms., c.l., works. lb. .15 - .17
l.c.l., same basis lb. .15½- .17½
unbleached, non-ret., dms., c.l., same basis lb. .13 - .15
l.c.l., same basis lb. .14½- .16½
Leucine dextro-laevo, dms., works. lb 12 25 -15 00
Licorice extract, mass, cns lb. .28 - .40
powd., bbls. lb. .34 - .48
Root, whole, bbls lb. .08 - .12
gran., bbls. lb. .12 - .17
powd., bbls. lb. .10 - .15
Lignosulfonate, 70% tannin, bgs., c.l., works lb. .06½- —
l.c.l., works lb. .06¾- .07
Lime, agricultural, bulk, works ton. 14.50 - —
Chemical (quicklime) lump, pebble, bulk, Adams, Mass. ton. 12.50 - —
Annville, Pa ton. 11.50 - —
Austin, Texas ton. 9.50 - —
Bellefonte, Pa. ton. 11.50 - —
Buffalo, N Y ton. 14.00 - —
Cedar Hollow, Pa ton. 11.50 - —
Duluth, Minn. ton. 12.50 - —
El Paso, Texas ton. 14.00 - —
Farnams, Mass ton. 14.00 - —
Gibsonburg, Ohio ton. 12.50 - —
Hannibal, Mo ton. 10.00 - —
Keystone, Ala ton. 10.25 - —
Kimballton, Va. ton. 10.25 - —
Knoxville, Tenn ton. 10.50 - —
Lee, Mass ton. 12.50 - —
Lewisburg, Ohio ton. 10.00 - —
Limedale, Ark ton. 10.00 - —
Los Angeles, Cal ton. 25.10 -26.84
Marble Cliff, Ohio ton. 10.00 - —
Martinsburg, W. Va. ton. 11.00 - —
Mosher, Mo. ton. 10.75 - —
Nelson, Ariz. ton. 14.50 -23.65
Quincy, Ill ton. 10.00 -13.00
Reddick, Fla ton 13.50 - —
Scotrock, Ala ton. 10.25 - —
Springfield, Mo ton. 12.25 - —
Winooski, Vt ton. 15.50 - —
Woodville, Ohio ton. 11.50 - —
York, Pa ton. 15.50 - —
Hydrated, paper bags, Adams, Mass ton. 15.50 - —
Annville, Pa ton. 14.50 - —
Austin, Texas ton. 13.00 - —
Bellefonte, Pa ton. 14.50 - —
Buffalo, N Y ton. 16.00 - —
Cedar Hollow, Pa ton. 14.50 - —
Chicago, Ill ton. 15.00 - —
Duluth, Minn ton. 14.00 - —
El Paso, Texas ton. 17.50 - —
Engle, W Va ton. 14.50 - —
Farnams, Mass. ton. 14.00 - —
Gibsonburg, Ohio ton. 16.50 - —
Hannibal, Mo. ton. 12.00 - —
Keystone, Ala ton. 13.50 - —
Kimballton, Va ton. 13.50 - —
Knoxville, Tenn ton. 13.00 - —
Lee, Mass ton. 15.50 - —
Lewisburg, Ohio ton. 14.00 - —
Limedale, Ark. ton. 12.00 - —
Marble Cliff, Ohio ton. 13.50 - —
McNeil, Tex ton. 13.00 - —
Meneminee, Mich. ton. 14.00 - —
Mosher, Mo. ton. 13.00 - —
North Tazewell, Va ton. 12.75 - —
Quincy, Ill. ton. 10.00 -12.00
Reddick, Fla ton. 16.00 - —
Scotrock, Ala ton. 13.50 - —
Springfield, Mo ton. 12.25 - —
Winooski, Vt ton. 15.50 - —
Woodville, Ohio ton. 14.50 - —
York, Pa ton. 14.50 - —
Spray, paper bgs., Adams, Mass. ton. 17.00 - —
Annville, Pa ton. 17.00 - —
Austin, Texas ton. 13.00 - —
Bellefonte, Pa. ton. 17.50 - —
Carey, Ohio ton. 11.00 - —
Duluth, Minn ton. 15.00 - —
Engle, W. Va. ton. 14.50 - —
Farnams, Mass ton. 14.00 - —
Gibsonburg, Ohio ton. 16.50 - —
Keystone, Ala ton. 13.50 - —
Kimballton, Va ton. 13.50 - —
Lee, Mass ton. 17.00 - —
Lewisburg, Ohio ton. 16.00 - —
Marble Cliff, Ohio ton. 16.00 - —
McNeil, Tex. ton. 16.00 - —
Meneminee, Mich ton. 14.00 - —
Mosher, mo. ton. 13.00 - —
North Tazewell, Va ton. 12.75 - —
Reddick, Fla. ton. 16.00 - —
Rockland, Me. ton. 10.00 - —
Springfield, Mo ton. 12.25 - —
Scotrock, Ala. ton. 13.50 - —
Winooski, Vt ton. 17.00 - —
Woodville, Ohio ton. 16.50 - —
York, Pa ton. 15.50 - —
Lime salts (see Calcium)
Lime-ammonia nitrogen, 20.5% N (see Ammonium nitrate with dolomite)
Limestone grd. bgs. works ton. 3.50 - 4.00
Linalool, ex bois de rose oil, dms. lb. 5.95 - 6.70
ex lignaloe wood oil, dms lb. 5.30 - 7.10
Linalyl acetate, ex bois de rose, 90-92%, dms lb. 5.35 - 6.25
96-98%, dms. lb. 6.75 - 7.15
ex petitgrain, bots lb. 3.90 - 4.25
Lindane, 25% formulation, dealers, cns., works lb 2.20 - —
dms., works lb. 2.10 - —
99%, tech., dealers, dms., works. lb. 2.75 - 3.35
Linden flowers with leaves, bls lb. .34 - .35
without leaves, bls lb. .40 - .41
Linseed meal, expeller, 32-34% bulk, Midwest, mills ton. 75.00 Nom.
extracted, 36%, same basis ton. 70.50 - —
Litharge, com'l, powd., bbls., c.l., works, frt. equald lb. .15 - —
l.c.l., same basis lb. .15½- —
Lithium benzoate dms lb. 1.65 - 1.67
Bromide, NF, bbls., works, frt. equald lb. 2.10 - 2.75
Carbonate, tech., dms lb. .90 - 1.10
Chloride, cryst., dms lb. 1.22 - 1.28
Citrate, NF, bbls., dms., kgs lb. 1.60 - 1.64
Fluoride, bbls., 10,000-lb. lots lb. 2.15 - —
ton lots lb. 2.20 - —
less ton lots lb. 2.25 - —
Hydride, powd., dms., works lb. 12.00 -14.00
Hydroxide, monohydrate, ton lots, dms. lb. 1.10 - —
Salicylate, dms lb. 1.60 - 1.70
Lithopone, ordinary, bgs., c.l., dlvd lb. .07½- —
l.c.l., dlvd. lb. .08¼- .08½
titanated (high-strength), bgs., c.l., dlvd. lb. .10 - —
l.c.l., dlvd lb. .11 - —
Lithopone prices, Pacific Coast, 1c. per lb. higher.
Lobelia herb, bls lb. .45 - —
Lobeline sulphate, bots., works oz. 29.50 -30.00
Logwood extract, crystals, No. 1, bbls., c.l lb. .41 - —
No. 2, bbls., c.l lb. .39 - —
liquid, No. 1, bbls., c.l lb. .20 - —
No. 2, bbls., l.c.l lb. .19 - —
No. 3, bbls., l.c.l lb. .18½- —
solid, No. 1 lb. .35 - —
Lycopodium, cs. lb. 1.50 - 1.75
Lysine hydrochloride, dextro-laevo, bots., kilo. 145.00 -149.00

M

Mace, Siauw, No. 1, bls lb. 1.30 - —
West Indian, No. 1, bls lb. 1.12 - 1.15
Magnesia, calcined, tech., cns., works lb. .32 - .34¼
synth., rubber grade, light bgs., works lb. .23 - .25
extra light, works lb. .31 - —
USP, light, cns lb. .34 - .36
heavy, bbls. lb. .36 - .38
Magnesite, chemical grade, calcined powd., bgs., c.l., works, frt. equald ton. 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewalan, Wash ton. 38.00 - —
Magnesium bromide, jars lb. .90 - 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .09½- —
l.c.l., frt alld lb. .10½- —
bbls., c.l., frt. equald lb. .10¾- —
l.c.l., frt alld lb. .11¾- —
kgs, c.l., frt. equald lb. .12 - —
USP, bgs., c.l., frt. equald lb. .11¼- —
l.c.l., frt alld lb. .12¼- —
bbls., c.l., frt. equald lb. .11¾- —
l.c.l., frt alld lb. .12¾- —
kgs., c.l., frt. equald lb. .13 - —
l.c.l., frt. alld lb. .14 - —

Magnesium carbonate is quoted frt. alld. to N. J. except to Atlantic, Burlington, Cape May, Cumberland, Glostershire Ocean and Salem counties, and to Phila county, Pa. Frt equald with N. Y. C. on all other destinations.

Chloride, anhyd., lump 95-98%, drums, c.l., works, frt. equald lb. .12¾- —
l.c.l., same basis lb. .14 - .15
powd., bgs., c.l., works ton. 50.00 - —
l.c.l., works ton. 55.00 -105.00
hydrous, flake, bgs., c.l., works, ton. 50.00 - —
Magnesium gluconate, dms., cns. lb 1.30 - 1.37
l.c.l., bgs ton. 55.00 -105 00
Glycerophosphate, dms., works lb. 5.40 - 5.50
Hydroxide, NF, medicinals, bbls., dms., kgs lb. 26½ .30
Hypophosphite, dms lb 1.60 - —
Laurate, bbls lb. .46 - .47
Metal, 99.8% ingots, cs., works lb. .27 - —
sticks, cs., works, frt alld. on carlots lb. .46 - .48
Oleate, fused, bbls lb. .31 - —
Oxide (see Magnesia, calcined)
Peroxide, 15%, dms., works lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls lb. .75 - —
Silicate (see Talc)
Silicofluoride, bbls., works lb. .09 - .10
Sulphate (see Epsom salt)
Stearate, ctns., c.l., frt. alld lb. .38 - —
l.c.l., same basis lb. .39 - .43
Trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb lots lb. .40 - —
100-lb lots lb. .45 - —
Bulky and super grades of magnesium trisilicate, 7c. per lb. higher.
Maleic anhydride dms., c.l. dlvd. E lb. .27 - —
l.c.l., dlvd. E lb. .28 - —
Prices on maleic anhydride W of Rockies, 1½c. higher.
Mandrake root, bls lb. .32 - .34
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech., bbls lb. .24 - —
Carbonate, bbls., works lb. .21 - —
Chloride, anhyd., dms., works lb. .20 - .22
Manganese dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, paper bgs., gross for net, works ton. 38.00 - —
paper-lined burlap bgs., works ton. 91.50 - —
dms., works ton. 94.00 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Gluconate, dms. lb. 1.79 - 1.93
Glycerophosphate, NF, fib dms lb. 4.70 - 4.80
Hydrate, bbls., dlvd lb. .33½- —
Hypophosphite, NF, dms lb 2.00 - —
Linoleate, liquid, 4.35% Mn., dms. lb. 30½- —
solid, precip., 8.2% Mn., bbls lb. 33½- —
Metal, cs., dlvd., East lb. .30 - —
Naphthenate, liquid 6% Mn., dms., frt. alld lb. .27 - —
Oleate, precip., bbls lb. .33½- —
Resinate, fused, 3½% Mn., dms. lb. 21¾- —
precip., dms lb. 24½- —
Stearate, ctns., c.l. lb. .32 - —
l.c.l. lb. .39 - .40
Sulphate, fertilizer grade 65% bgs., c.l., dlvd. S. E ton. 80.50 - —
l.c.l., dlvd. S. E ton. 87.50 - —
Tallate, 6%, dms lb. .24½- —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton. 72.00 -73.00
So. American, 30% tannin, c.l., ex dock ton. 55.00 -59.00
Mannitol, com'l, dms., works lb. .40 - .43
reagent, 50-lb. dms., works lb. .85 - —
Melamine, bgs., ton lots, works lb. .33 - —
500 to 2,000-lb lots, works lb. .33½- —
smaller lots, works lb. .38½- —
Menadione, USP, bots. gram. .06 - .06½

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You now get maximum product protection and long-lasting exterior finish

• United States Steel Products' cleaning and finishing process assures a finish similar in durability to those applied to home appliances and automobiles. U. S. Steel Drums are free of all scale, dirt and grease, and are, in addition, thoroughly rust-inhibited. This new process gives you the safest container that money can buy . . . containers that will mean substantial savings for you due to reduced customer claims caused by product contamination. And the exterior finish will remain bright and clear, unmarred by rust and corrosion for a longer period than an untreated drum or a drum treated by any other process.

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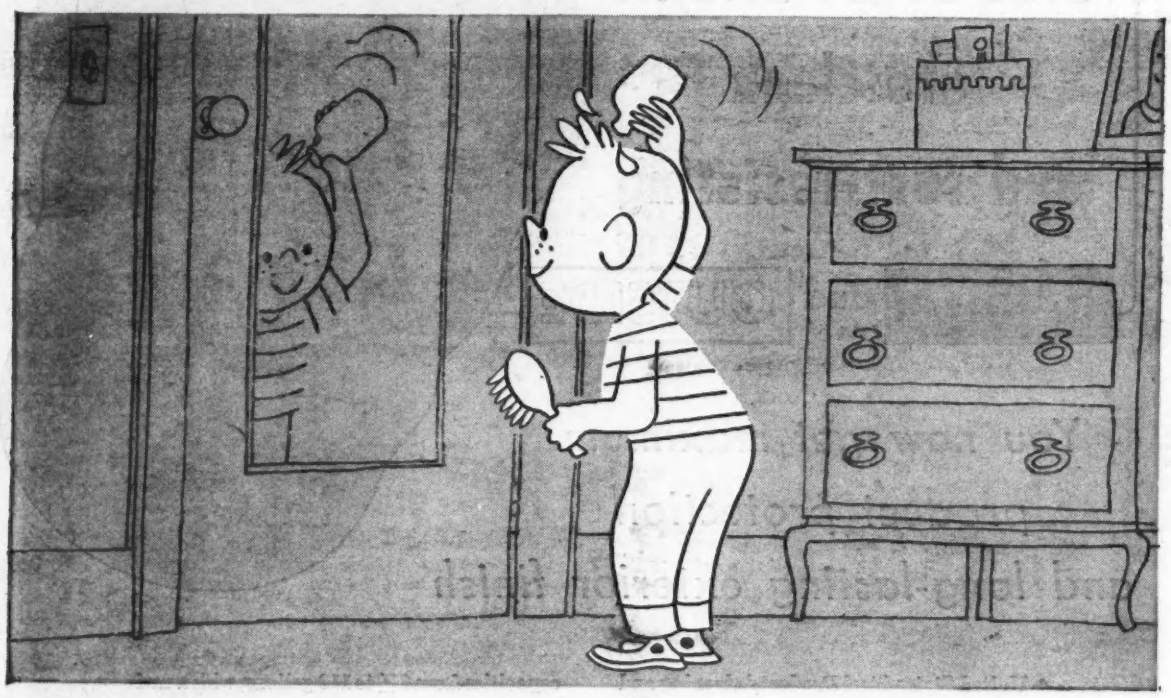
USS

UNITED STATES STEEL

Menthol—Monosodium Phosphate

Menthol, natural, USP, Brazilian, cs. lb. 5.00 - —
Japanese, cs. lb. 8.50 Nom.
synthetic, USP, racemic, cns lb. 4.95 - —
Menthyl salicylate, tins lb. 4.00 - 4.25
Mercaptobenzothiazole, bgs., nb. dms. ton lots, works, frt. alld lb. .38 - —
less ton lots, same basis lb. .40 - —
Mercaptobenzothiazyl disulphide, bgs. fib dms., ton lots, works frt alld lb. .48 - —
less ton lots, same basis lb. .50 - —
Mercury, ammoniated (see White precipitated, USP).
Bichloride (see Corrosive sublimate).
Chloride (see Calomel).
Cyanide NF VIII powd fib dms. lb. 5.29 - —
Iodide, red, NF, fib, dms. lb. 6.47 - —
yellow NF, fib dms lb 6.72 - —
Metal (see Quicksilver).
Oxide, red, NF (see Red precipitate).
yellow tech (see Yellow mercury oxide)
USP fib dms lb 4.64 - —
Mesityl oxide, dms., c.l., dlvd. lb. .1350- —
l.c.l., dlvd. lb. .1450- —
tanks, dlvd. lb. .1150- —
Metaldehyde, dms., works lb. .95 - 1.25
Meta-aminophenol, distilled, dms., ton lots lb. 2.05 - —
less than ton lots lb. 2.50 - —
Metachloroanilin, dms., c.l., frt. equald. lb. .75 - —
l.c.l., same basis lb. .80 - —
Metacresol, 98%, dms., c.l., works lb. .73½- —
l.c.l., works lb. .74½- —
Metanitroanilin dms., frt. alld. lb. 1.05 - —
Metanitroparatoluidin, bbls. lb. 1.50 - —
Metaphenylenediamine, kgs., frt. alld. lb. .90 - —
Metatoluidine, bbls., c.l., works, frt. alld. lb. .79 - —
l.c.l., same basis lb. .80 - —
tankcars, same basis lb. .78 - —
Metatolylenediamine, crystals, fib. dms., frt. alld. lb. .94 - —
powder, fib. dms., same basis lb. 1.00 - —
Methanol, natural denaturing grade, dms., c.l., frt. alld gal. .78 - —
l.c.l., frt. alld gal. .79 - —
tanks, frt. alld gal. .70 - —
Prices on natural methanol W of Miss., 3c. higher.
synthetic, Zone 1, dms., dlvd gal. .45 - .45½
l.c.l., dlvd. gal. .52 - —
tanks, dlvd. gal. .32 - .33½
zone 2, dms., c.l., dlvd gal. .49½- —
t.c.l., dlvd within established whse delivery zone gal. .56½- —
tanks, dlvd. gal. .35½- —
Synthetic methanol zones are: Zone 1 is all continental U S E of eastern boundaries of Ariz., Idaho and Utah Zone 2 is remainder of U S west of above state boundaries, comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine)
Methionine, dextro-laevo, fib dms., frt alld 50-lb or more lb. 4.55 - —
feed grade, 98% fib., dms., same basis lb 3.00 - —
97% fib dms, same basis lb 2.97 - —
Methoxychlor, 50% wettable powder, dealers, dms. cs., frt. alld lb. .81 - .84
Methyl abietate, non-ret. dms., c.l., dvld, zone 1 lb. .20½- —
l.c.l., same basis lb. .21 - —
hydrogenated, zone 1, non-ret. dms., c.l., dlvd lb. .21 - —
l.c.l., same basis lb. .21¼- —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss, Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., l.c.l., E. of Miss., frt. alld gal. .62½- —
syn., dms., c.l., dlvd, E gal. .66½- —
l.c.l., dlvd E gal. .72¼- —
tanks, dlvd. E gal. .54½- —
Synthetic methyl acetone E. territory in all States East of and including Colo., Mont., N. Mex. and Wyo. West territory in all States West of those four.
Acrylate, dms., c.l., and truckload works lb. .45½- —
less than truckload works lb. .46 - —
tanks, works lb. .42¾- —
Alcohol (see Methanol).
Anthranilate, cns. lb. 2.35 - 2.65
Benzoate, cns., dms. lb. .53 - .65
Bromide, jobbers, cyls., various sizes works lb. .47 - .61
Chloride, indust., cyl., frt. equald., lb. .21 - —
tanks, multi-unit, same basis. lb. .15 - —
single unit, same basis lb. .11½- —
Methyl chloride, refrigerator mfrs., cyls., dlvd lb. .40 - .42
other consumers or service men, cyls., dlvd lb. .57 - —
Cinnamate, cns lb. 1.43 - 1.80
Cyclohexanol, dms., c.l., works lb. .35½- —
t.c.l., works lb. .36 - —
tanks, works lb. .34 - —
Formate, refd., dms. lb. .35 - .40
tech., non-ret. dms., any quantity, works lb. .08 - —
tanks works lb. .07 - —
Lactate dms. t.c.l., works lb. .35 - —
Methacrylate, dms., c.l., and truckload, frt. equald., with Belle, W. Va., and Arlington, N. J lb. .36½- —
smaller lots, same basis lb. .37 - —
tanks same basis lb. .35 - —
Parahydroxybenzoate, USP, bots lb. 2.10 - 2.20
fib dms. lb. 1.90 - 2.00
Roseanilin chloride, NF, fib. dms. lb. 5.44 - —
Salicylate, USP, dms. lb. .53 - —
cns., 50 lbs. lb. .58 - —
Testosterone, USP, 100-gm. lots. gm. .79 - —
Methylamyl acetate, dms. c.l., dlvd. E lb. .15 - —
l.c.l., dlvd. E lb. .16 - —
tanks, dlvd. E lb. .13 - —
Ketone, dms., works lb 1.05 - —
Methylcellulose, special, vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .78 - —
2,000-lb. lots and more, same basis lb. .85 - —
smaller lots, frt alld. on 100 lbs lb. .89 - 1.00
standard vis. (15-400 cps.), 50-lb. bgs., c.l., alld lb. .66 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt alld. on 100 lbs lb. .75 - .85
b-Methylnaphthalene, 32°C m.p., dms., works lb. .90 - —
Methylene blue, kegs, 100-lb. lots, frt adjusted lb 3.25 3.60
smaller lots, same basis lb. 3.40 - 3.60
Chloride, industrial, dms., c.l., dlvd. E lb. .13½- —
Methylethylketone, dms., c.l., dlvd. lb. .13 - —
l.c.l., dlvd. lb. .14 - —
tanks, dlvd lb. .11 - —
Methylethylpyridin, dms., c.l., works. lb. .47½- —
t.c.l works lb. .48 - —
tanks, works lb. .46 - —
Methylheptincarbonate, bots lb. 30.00 -42.00
Methylionone, A, cns lb 6.55 8.80
D, cns. lb 7.50 9.55
prime, cns. lb 4.55 6.40
Methylisobutyl carbinol (See Carbinol, methylisobutyl)
Ketone, dms., c.l., dlvd lb. .15 - —
l.c.l., dlvd lb. .16 - —
tanks, dlvd. lb .13 - —
Methylnaphthyl, ketone, cans lb. 3.60 - 3.95
Methylparaben (see Methyl parahydroxybenzoate).
Methylpentanediol (see Hexyleneglycol).
Methylphenylpyrazolone, dms., 250-lb. lots, dlvd lb. 1.70 - —
smaller lots, dlvd lb. 2.00 - —
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works lb. .04¼- —
roofing, 20 to 80 mesh, works lb. .03 - .04
wet-ground, mcuce, bgs., c.l., works, frt. alld., E lb. .06¼- —
l.c.l., ex whse. or frt. alld. E lb. .07 - —
paint or lacq., bgs., c.l., works, frt. alld lb. .07¾- —
l.c.l., ex whse. or frt. alld. E lb. .08½- —
rubber, bgs., c.l., works, frt. alld E lb. .07½- —
l.c.l., ex whse. or frt. alld. E lb. .08½- —
wallpaper, bgs, c.l., works, frt. Alld., E lb. .07¾- —
l.c.l., ex whse. or frt. alld. E lb. .08¼- —
white, extra fine, bgs., c.l., works, frt. alld. E lb. .07¾- —
l.c.l., ex whse or frt. alld. E lb. .08½- —
Mica, wet-grd., W. of Miss. R., ½c. higher; W of Rockies, 1c. higher.
Milk powder, skimmed, roller, bbls., c.l. lb. .14 - .16¾
spray, bbls., c.l. lb. .16¼- .17¾
whole, roller, bbls., c.l., lb. No prices.
spray, bbls., c.l. lb. .32½- .35¼
Sugar, crude, bgs., c.l., works lb. .18 - —
edible, bgs., 30,000-lb. lots, works lb. .24 - —
2,000-lb. lots, works lb. .24¾- —
200-1,800-lb. lots, works lb. .25¼- —
Edible milk sugar in fib dms., 1c. higher.
USP, fib. dms., 30,000-lb. lots, works lb. .29 - —
2,000-lb lots, works lb. .29¾- —
200-1,800-lb lots, works lb. .30¼- —
USP milk sugar in bgs. 1c. lower
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .10 - .10½
New York gal. .12½- —
Molybdenum metal, 98% Mo powd., kgs lb 3.00 Nom.
Trioxide, pure, kgs., works, basis Mo content lb. 1.40 - —
technical, kgs. works basis Mo content lb 1.15 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55 - —
l.c.l., same basis lb. .56 - —
tanks, same basis lb. .53 - —
Monochlorobenzene, dms., c.l., frt. alld. or dlvd. E lb. .11½- —
l.c.l., same basis lb. .12½- —
tanks, same basis lb. .10 - —
Monochlorobenzene prices in the West, 1¼c higher.
Monoethanolamine, dms., c.l., dlvd. E lb. .29¾- —
l.c.l., same basis lb. .30¾- —
tanks, same basis lb. .28 - —
Monoethylalphanaphthylamine, dms., works lb. 1.02 - —
Monoethylamine, 70% contained amine, dms., c.l., dlvd. E. lb. .33 - —
l.c.l., dlvd. E lb. .34 - —
tanks, dlvd. E lb. .31 - —
Monoethylanilin, dms., c.l., frt. alld. lb. .51 - —
l.c.l., frt. alld lb. .52 - —
tanks, frt. alld lb. .50 - —
Monoethylorthotoluidin, bbls lb. .88 - —
Monoisopropylamine, dms. c.l., dlvd. lb. .30½- —
l.c.l., same basis lb. .31½- —
tanks, same basis lb. .28½- —
Monomethylamine, 25%-40% dms., c.l., frt. equald., basis 100%. lb. .37 - —
l.c.l., same basis lb. .37½- —
tanks same basis lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).

When a man's a lady's man



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Mono-tertiary-butylmetacresol, dms., c.l., works lb. .49 - —
l.c.l., works lb. .50 - —
tanks, works lb. .48 - —
Morphine, cns oz. 12.40 -12.60
Acetate, anhyd., cns oz. 9.95 -10.00
Hydrobromide, cns oz. 9.90 9.95
Hydrochloride, NF, cns oz. 9.90 9.95
Sulphate, USP, cns oz. 9.90 -10.05
Morpholine dms., c.l., dlvd. E lb. .54¾- —
l.c.l., dlvd. E lb. .55¾- —
tanks, dlvd. E lb. .52¾- —
Musk, natural, Tonquin grains, bots. oz. No stocks.
synthetic, ambrette, 100-lb. lots, fib. dms. lb. 5.15 - —
25-lb. lots, cns lb. 5.20 - —
5-lb. lots, cns lb. 5.30 - —
ketone, 100-lb lots, fib. dms. lb 5.30 - —
25-lb lots cns lb 5.35 - —
5-lb. lots, cns lb. 5.45 - —
xylol, 100-lb. lots, fib. dms lb. 1.40 - —
25-lb. lots, cns lb. 1.45 - —
5-lb. lots, cns lb. 1.50 - —
Mustard seed, Danish, yellow, bgs. lb. .11 - .11½
Dutch yellow, bgs lb. .10½- .11
English, yellow, bgs lb. .11 - .12
Montana, Oriental, bgs lb. .12 - —
yellow, bgs lb. .08¼- —
Myrobalans, J-1, assorted, bgs., ex dock ton. 48.00 Nom.
crushed, bgs., ex dock ton 61.50 - —
ordinary, bgs., ex dock ton. 44.00 - —
extract, indian, solid 53% tannin, ex dock, plus duty lb. .07¼- —

N

Naphtha, painters (see Petroleum naphtha V M & P.)
Solvent (see S.)
Naphthalene, crude, dom., 74° tanks, frt. equald lb. .045 - —
78°, dms., c.l., same basis lb. .059 - —
l.c.l., same basis lb. .0615- —
tanks, same basis lb. .05 - —
imported, 78°, large lots lb. .0335- .035
Naphthalene, refined, industrial, dom., chipped or crushed, bgs., frt. equald lb. .10½- —
flake, bgs., same basis lb. .11½- —
tanks, same basis lb. .09¾- —
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis, lb. .13¾- —
cs. 50 lbs. c.l., same basis lb. .14 - —
1-lb pkgs. c.l. same basis lb. .16¼- —
a-Naphthol, bbls., frt. alld lb. 1.00 - —
b-Naphthol, resublimed, dms., works, lb. .78½- —
tech., bbls., c.l., works lb. .32½- —
l.c.l., works lb. .34½- —
Benzoate, fib. dms., works lb. 3.00 - —
custom contract lb. 1.65 - —
Salicylate, dms lb. 5.00 - —
Sulfate, cns lb. 35.00 - —
a-Naphthylamine, bbls., frt. alld lb. .50 - —
b-Naphthylamine, tech., bbls., works, lb. 1.05 - 1.10
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin fib. dms., 100-kilo lots, basis, activity gm. .60 - —
1-kilo lots, basis, activity gm. 1.20 - —
Nepheline syenite glass, 24 mesh, bulk, works ton. 14.25 - —
pottery, 200 mesh, bulk, works, N Y ton. 18.25 - —
Nepheline syenite in bgs., $3 per ton higher than bulk
Nerolin, cns lb. 2.15 - 2.65
Niacin (see Acid, nicotinic).
Niacinamide (see Nicotinamide).
Nickel acetate bbls., dlvd lb. .75 - .83¼
Carbonate, bbls. dlvd lb. .71 - .78
Chloride bbls. dlvd lb. .37 - .45
Formate, bbls., ton lots, frt alld. lb. .64 - .65
Metal, electro cathodes, cs., works lb. .60 - —
Nitrate, bbls. works lb. .36 - .37
Oxide, black, bbls lb. .69 - —
Sulphate, bgs. c.l., dlvd lb. .29 - —
l.c.l., dlvd lb. .29½- .37
Nicotinamide USP, dms., frt. adjusted kilo 12.00 -12.30
Hydrochloride, dms., frt. adjusted, kilo. 11.50 -11.80
Nicotine sulphate, 40%, dealers, 50-lb. dms., frt. alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld. lb. 1.03 - —
Niger seed, bgs lb. .11½- .12
Nikethamide, cbys. lb. 7.50 - 8.00
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .12 - —
l.c.l., frt. alld lb. .13 - —
tanks, frt. alld lb. .11 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works lb. .34 - —
l.c.l., same basis lb. .35 - .37
18-25 cps., bbls., c.l lb. .36 - —
l.c.l., same basis lb. .37 - .39
250-400, 600-1,000 secs., bbls., same basis lb. .39 - —
l.c.l., same basis lb. .40 - .42
spirit-soluble, 30-35 cps., ¼, ½, sec., bbls., same basis lb. .41 - —
l.c.l., same basis lb. .42 - .44
5-6, 40-60 secs., bbls., c.l., same basis lb. .40 - —
l.c.l., same basis lb. .41 - .43

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

Nitroethane dms. dlvd E. of Rockies lb. .25 - —
Nitrogen solution, tanks, works, 37-40.8% N, basis 100% ton. 128.00 - —
Nitrogenous process tankage bulk, works unit ton. 3.50 - 4.00
Sewage sludge, bulk, works unit-ton. 3.75 - 4.50
Nitromethane, dms. l.c.l., dlvd E. of Rockies lb. .25 - —
a-Nitronaphthalene, bbls, frt. alld. lb. .41 - —
Nonylphenol, dms., c.l., works, frt. alld lb. .30 - .30¾
l.c.l., works lb. .30½- .31¾
tanks, works lb. .29 - —
Nutgalls, Aleppo, bgs. lb. .38 - —
Chinese, bgs lb. .45 Nom.
Nutmeg, East Indian, whole, cs. lb. .38 - —
shrivels, bgs. lb. .38 - —
West Indian, bgs. lb. .29 - —
Nux vomica, bls lb. .10 - .12
powdered, bbls., bxs lb. .15 - .17

O

Octane, industrial, tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15¾- —
Borger, Tex gal. .15¾- —
Octanol, normal, tech., dms., c.l., dlvd lb .35 - —
l.c.l. dlvd lb. .37 - —
tanks, dlvd lb. .32½- —
Octylphenol, dms., c.l., works lb. .23¾- —
l.c.l., works lb. .24¾- —
tanks, works lb. .22¾- —

(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies siberica, cns lb. 2.05 - 2.55
Almond, artificial, bitter (see Benzaldehyde).
natural, bitter, F.P.A., bots lb. 3.00 - 3.40
NF, bots. lb. 3.25 - 3.75
sweet, USP, dms., cns lb. .50 - .90
Allspice (see Oil, pimento).
Amyris, dms lb. 1.40 - 1.75
Angelica root, bots lb. 70.00 -120.00
seed, bots lb. 56.00 -95.00
Anilin (see A).
Apricot, kernel, USP, dms lb. .45 - .50
Avocado, cns lb. 3.25 - —
Babassu, crude, tanks lb. No stocks.
Bay, NF, Puerto Rican, 50-55%, cns lb. 1.45 - 1.90
55-60%, cns. lb. 1.65 - 2.10
West Indian, 50-55%, cns., dms. lb. 1.45 - 2.25
Bergamot, artif., cns. lb. 2.90 - 6.00
natural, NF, Italian, cns lb. 10.75 -13.00
Birchtar, crude, cns lb. 1.75 - 2.00
rectified, NF, cns. lb. 2.50 - —
Bois de rose, Brazil dms. lb. 3.95 - 4.25
Mexican (see Oil, lignaloe wood).
Bone, dms. wenrs lb 65 .70
Cajeput, native, cns lb. 1.90 - —
redist., USP, cns lb. 2.45 - 3.00
Calamus, bots. lb. 12.00 -20.00
Camphor, sassafrassy, dms. lb. .20 - 40
white, dms lb. .19 - .45
Cananga, native, cns lb. 8.50 -10.25
rectified, cns. lb. 12.50 -13.75
Capsicum (see Capsicum oleoresin)
Caraway, NF, cns lb. 2.65 - 3.30
Cardamom, NF, bots lb. 32.50 -39.00
Cassia, USP (see Oil, cinnamon, USP).
Castor, blown, dms., c.l. lb. .2100- —
l.c.l. lb. .2250- —
dehydrated, bodied, dms., c.l., lb. .2360- —
l.c.l. lb. .2410- —
tanks lb. .2260- —
unbodied, dms., c.l. lb. .2210- —
l.c.l. lb. .2260- —
tanks lb. .2110- —
hydrogenated, bgs., l.c.l. lb. .2650- —
No. 1, Brazilian, tanks lb. .1550- —
USP, dms., c.l. lb. .1900- —
l.c.l. lb. .1950- —
tanks lb. .1800- —
refined and deodorized, dms., c.l. lb. .2050- —
l.c.l. lb. .2100- —
tanks lb. .1950- —
No. 3, tech., dms., c.l. lb. .1875- —
l.c.l. lb. .1925- —
tanks lb. .1775- —
sulphonated, 50%, dms., l.c.l. lb. .13½- .14
75%, dms., l.c.l. lb. .17 - .17½
Cedarleaf, cns., dms lb. 2.05 - 3.00
Cedarwood, cns., dms lb. .55 - .75
Celery seed, bots lb. 15.50 -21.00
Chamomile, blue, Hungarian, bots. lb. 175.00 -280.00
Chaulmoogra, NF cns., dms. lb. .55 - .70
Chinawood (see Oil, tung).
Cinnamon bark, bots lb. 25.50 -60.00
leaf, cns. lb. 1.25 3.25
USP, cns., dms., (Cassia) lb. No stocks.
Citronella, Ceylon, cns., dms lb. .60 - 1.00
Java, true, dms lb. .70 - .80
Java-type, cns lb. .60 - .93
Clove, USP, cns., dms lb. 4.90 - 6.40
Coconut, crude, tanks, N. Y lb. .17¼- —
Pac. Coast lb. .16¼- —
refined, Cochin type, tax incl., ret. dms., l.c.l. lb. .24 - —
deodorized, tax incl., non ret. dms., c.l. lb. .26¾- —

Mono-tertiary-butylmetacresol—Oil, Fish

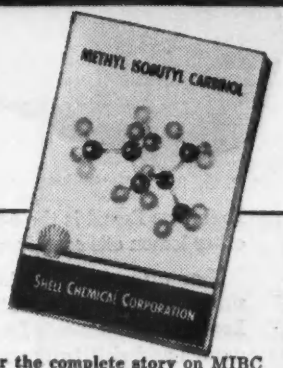
Oil, cod, Newfoundland, dms. lb. .09½- .10
Codliver, USP, dms. gal. 1.55 - 1.65
Copaiba, cns. lb. 1.80 - 2.50
Coriander, USP, bots lb. 16.80 -22.00
Corn, crude, tanks, works lb. .13⅜- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05¼ Nom.
refined, salad, dms lb. .18 - .18⅜
tanks lb. .16½- —
Costus, bots. oz. 9.00 - —
Cottonseed, crude, tanks, South-East lb. .12 - —
Valley lb. .12 - —
Texas lb. .11⅞ Nom.
foots (soapstock), acid 95%, tanks, N. Y lb. .03¼- —
raw, 50%, tanks, same basis. lb. .01½ Nom.
refined, salad, dms lb. .17½- .18
tanks lb. .16 - —
Creosote (see Creosote, coaltar).
Croton, cns. lb. 4.30 - 5.50
Crude (see Petroleum, crude).
Cubeb, cns lb. 4.50 6.00
Cumin, bots. lb. 4.15 - 5.25
Cypress, bots. lb. 5.30 - —
Degras (see D).
Dillseed, bots. lb. 2.80 - —
Dillweed, dom., dms., bots lb. 3.60 - 5.25
Dip (see D).
Erigeron, cns lb 5.50 7.50
Eucalyptus, NF rectified 70-80%, dms lb. .60 - .93
80-90%, dms lb. .83 - 1.25
Fennel, sweet, USP, cns lb. 2.30 - 3.25
Fir, Canada, cns lb. 2.65 3.40
Fish, refined, alkali, dms lb. .1450- .1550
kettle-bodied, dms. lb. .1630- .1730
light-pressed, dms. lb. .1300- .1400
tanks lb. .11½- —

Methyl isobutyl carbinol—companion *latent* solvent to the powerful Shell ketone *active* solvents—makes it possible for you to use greater quantities of low-boiling alcohols while maintaining good blush resistance, gloss and flow.

Blended with IPA to offset its slower evaporation rate, MIBC allows greater flexibility in formulation to meet the lacquer specifications of individual customers.

You can order MIBC with other solvents in compartment trucks or tank cars for short notice delivery at bulk prices.

The famous Shell "Quality Group" of solvents includes, among others, MEK, MIBK and IPA . . . preferred by the nation's leading formulators.



For the complete story on MIBC in lacquer formulation, write for SC:52-21. Also ask for Technical Bulletin SC:52-51, *MIBC As A Latent Solvent in Furniture-Type Nitrocellulose Lacquers.*

SHELL CHEMICAL CORPORATION
CHEMICAL PARTNER OF INDUSTRY AND AGRICULTURE
Eastern Division: 380 Madison Avenue, New York 17 • Western Division: 100 Bush Street, San Francisco 6
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Oil, Fishliver—Orris Root

Oil, fishliver, crude, for feeds or concentrating, 4,000 to 12,000 A units per gm., dms., 1,000,000 units. .08 - .09
10,000 to 20,000 A units per gm., dms 1,000,000 units. .09 - .10
25,000 to 35,000 A units per gm., dms 1,000,000 units. .09 - .10
40,000 to 55,000 A units per gm., dms 1,000,000 units .10½- .11
100,000 A units per gm., dms 1,000,000 units. .12 - .14
200,000 A units per gm., dms 1,000,000 units. .12 - .14
300,000 A units per gm., dms 1,000,000 units. .12 - .14½
400,000 A units per gm., dms 1,000,000 units. .12 - .14½
500,000 A units per gm., dms 1,000,000 units. .12 - .14½

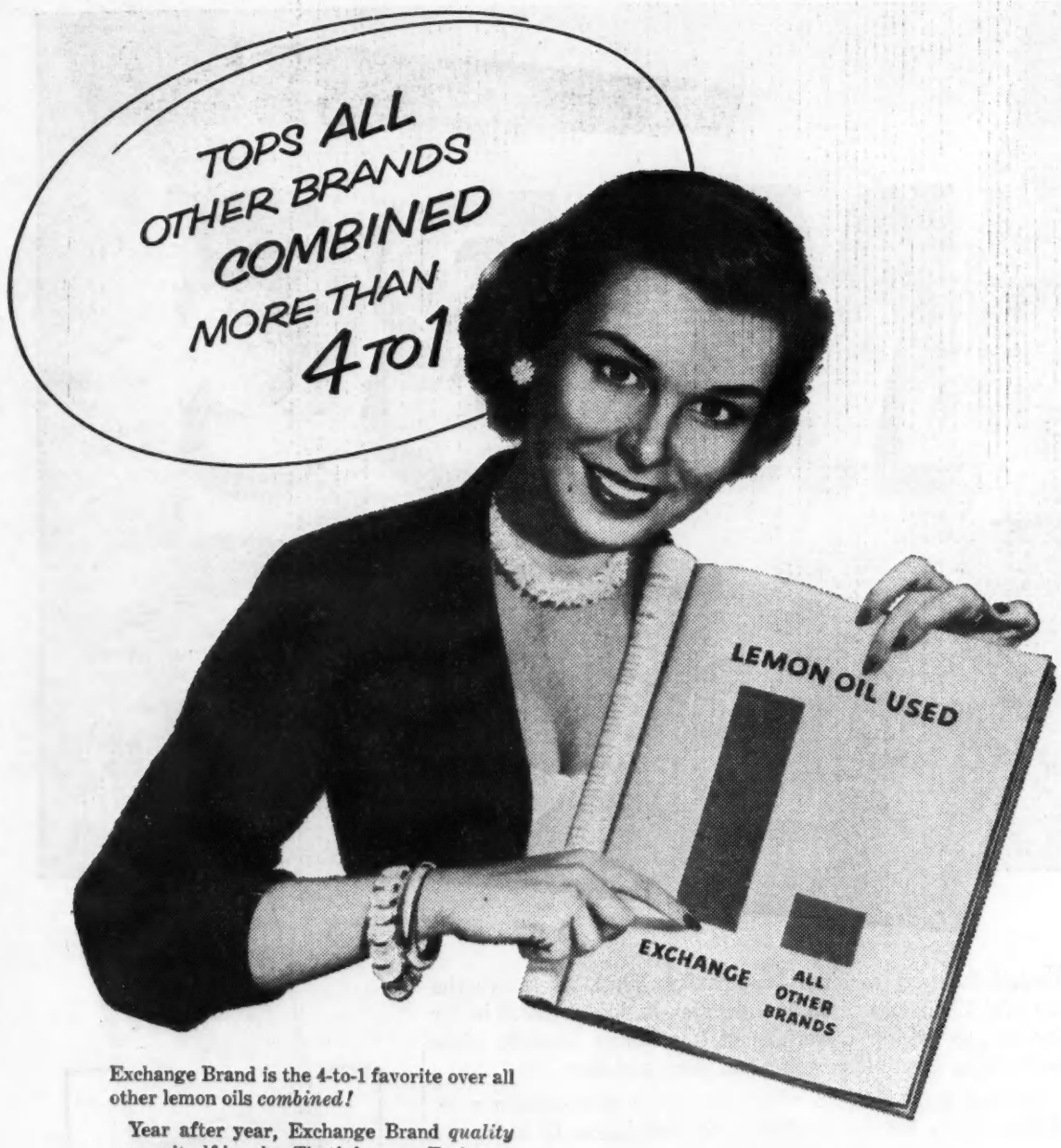
Prices above are based on the USP XIV method of conversion, Morton-Stubbs Corrected E x 1900.

Fusel (see F).
Garlic, pure, bots. oz. 8.50 -10.50
Gaultheria (see Oil, wintergreen).
Geranium, Algerian, cns. lb. 8.15 -10.50
Bourbon, cns. lb.10.75 -13.50
Turkish (see Oil palmarosa)
Ginger, dist., bots. lb.10.50 -13.00
Grapefruit, dms. lb. 3.15 - 3.25
Grease, No. 1, dms lb. .11½- .12
extra, winter, strained, dms lb. .15½- .15¾
prime, burning, dms. lb. .16¼- .16¾
Guaiacwood, cns. lb. 2.10 - 2.50
Hemlock, cns. lb. 2.10 - 2.50
twice rectified, bots lb 3.60 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns lb. .42 .50

Oil, juniper berry, NF, VIII, bots. lb. 2.70 - 4.00
Lard (see Oil, grease).
Laurel leaf, dms., cns. lb. 9.75 -12.50
Lavandin, dms., cns. lb. 2.00 - 2.75
Lavender, flower, USP, French, 30-32% ester, cns. lb. 2.50 - 4.50
38-40% ester, cns. lb. 5.60 - 7.25
40-42% ester, cns. lb. 6.40 - 7.60
Spike, Spanish, cns. lb. 1.50 - 2.00
Lemon, USP, Calif., cns., dms. lb. 7.10 - 7.50
Messina, cns. lb. 7.00 -10.00
terpeneless, bots lb.32.00 -85.00
Lemongrass, cns., dms. lb. 1.35 - 1.65
Lignaloe wood, Mex., cns. lb. 3.25 - 4.25
Lime, distilled, Mexican, cns lb. 5.25 - 6.50
West Indian, cns. lb. 5.40 - 7.25
expressed, West Indian, cns lb. 7.75 - 8.50
terpeneless, bots lb.29.50 -100.00
Linseed, raw, dms., c.l., N.Y. lb. .1695- —
l.c.l. lb. .1745- .1765
tankcar, f.o.b. Minneapolis lb. .1420- —
New York lb. .1545- —
tankwagon, New York lb. .1575- —
Boiled linseed oil, .006c per lb. higher.
Mace, dist., cns., dms. lb. 2.45 - 4.25
Mandarin, Floridian, dms. lb. 2.75 - 5.35
Italian, cns. lb. 6.25 - 8.50
Menhaden, crude, tanks, Atlantic Coast lb. .07½- Nom.
Gulf ports lb. .07½- Nom.
Mineral, white (see Oil, white mineral)
Mirbane (see Nitrobenzene).
Mustard seed, nat., dms. lb. .15¾- .16
synthetic, cns., dms lb. 1.60 1.85

Oil, neatsfoot, 15° cold test, dms., lb. .33 - .34
20° cold test, dms. lb. .32 - .33
30° cold test, dms. lb. .30 - 31
Neroli, NF, French, bots lb.165.00 -250.00
petale, bots. lb.38.50 -150.00
Nutmeg, USP dist., East Indian, cns., dms lb. 2.85 - 3.65
West Indian, cns., dms lb. 2.60 - 3.65
Ocotea cymbarum, dms. lb. .68 - 1.00
Oiticica, liquid, dms. lb. .18½- .19
tankcars lb. .16¾- .17
Oleo, extra, dms. lb. .18⅝- .18¾
Olibanum, bots. lb. 5.50 - 7.65
extra fine, bots lb 8.00 - —
Olive, edible, dms., duty paid lb. 2.35 - 2.45
Orange, sweet, dist., cns lb. .40 - .80
expressed, USP, Brazilian, cns., dms lb. No stocks.
Calif., cns., dms lb. .70 - 1.25
Florida, cns., dms lb. .64 - 1.25
Messina, cns lb. 3.85 - 5.85
West Indian, cns., dms lb. 2.50 - 3.65
sesquiterpeneless, bots. lb.100.00 -150.00
Origanum, Spanish, cns. lb. 1.95 - 2.85
Palm, clarified, dms lb. .12¾- —
Kernel, tankcars lb. .16½ Nom.
Palmarosa, cns. lb. 5.00 - 8.75
Paraffin, pale, 100-110 vis., at 100°F tanks East Coast refinery gal. .14 - —
Patchouli, dms. lb. 7.20 - 9.25
Peach kernel, USP (see Oil apricot kernel).
Peanut, crude, tanks, f.o.b. mills lb. .18½ Nom.
refined, dms. lb. .23½- .24
tanks lb. .22 - —
Pennyroyal, USP, imported, cns. lb. 1.60 - 2.40
Peppermint, natural, dms. lb. 5.60 - 6.35
redist., USP, dms. lb. 5.85 - 7.50

Oil, persic, USP (see Oil, apricot kernel).
Petitgrain, S. American, cns., dms. lb. 2.60 - 2.90
Pimento berry, NF, dms. lb. 4.20 - 6.00
leaf, cns. lb. 2.35 - 2.75
Pine, dest., dist., dms., extra, c.l., works gal. .75½- —
l.c.l. gal. .76½- —
ex whse. gal. .95½- —
steam dist., dms., ex whse., N.Y.C. lb. .143 - .153
Pineneedle, Siberian (see Oil, abies sibirica).
Putty, petroleum, dms., c.l., divd. lb. .11 - —
l.c.l., same basis lb. .12 - —
tanks, same basis lb. .10 - —
Rapeseed, tankcars lb. .16½- —
Red (see Acid, oleic).
Rice bran, clarif., dms lb. .16½- .16¾
tanks, divd. E lb. .14½- —
Rose, natural, Bulgarian, bots oz.55.00 -62.25
Rosemary, Spanish, tech., cns., dms lb. .60 - .70
USP, cns., dms lb. .80 - 1.00
Rue, bots lb. 2.25 - 2.50
Safflower dms., c.l., Atlantic coast. lb. .17¼- —
tanks, same basis lb. .15¾- —
Sage, clary, bots lb.20.00 -25.00
Dalmatian, cns lb. 6.75 - 8.25
Spanish, cns lb .90 1.25
Sandalwood, NF, cns lb. 9.25 -11.50
Sardine, crude, tanks, Pac. coast. lb. No stocks.
Sassafras, artificial, dms lb. .60 - .90
natural Brazilian (See Oil, ocotea cymbarum)
domestic, USP, cns., dms lb. 1.70 - 2.25
Savin, cns lb. 2.75 —
Savory, cns. lb No stocks.
Sesame, refd., dms lb. .36 - .37
Shingle stain, tar distillate, dms., c.l., works lb. .33 - —
l.c.l., works lb. .35 - —
tanks, works lb. .23 - —
Snakeroot, Canada, cns lb.29.50 -31.00
Soybean, crude, tanks, Decatur lb. .12 - —
foots (soapstock), acid, 95%, tanks, N. Y. lb. .06¼- —
raw, 50%, tanks, N. Y. lb. .02¾- —
refined, alkali, dms lb. .16¼- .16¾
tanks lb. .14¾- —
clarified, alkali, dms., c.l. lb. .15⅛- .15⅝
tanks lb. .14¼- —
salad, dms. lb. .16⅛- .16⅝
tanks lb. .14⅝- .14¾
Spearmint, USP, dms lb. 6.00 - 6.55
Sperm, bleached winter, 45°, dms. lb. .1375- .1450
tankcars lb. .1200- —
natural winter, 45° dms. lb. .1275- .1325
tankcars lb. .1100- —
Spruce, cns., dms lb. 2.10 - 2.75
Sweet birch, USP, Northern, cns. lb. 4.25 - 9.50
Southern, cns lb. 2.00 - 3.00
Tall, crude, tanks, works ton.45.00 - —
refined, dms., c.l., works lb. .06¼- .07¼
l.c.l., works lb. .06½- .07⅛
tanks, works lb. .05 - .06
Tallow, acidless, dms lb. .13½- .13¾
Tansy, dms. lb. 7.75 - 9.00
Tar, pine, com'l, dms., extra, c.l., works gal. .42½- —
l.c.l., works gal. .50½- —
whse. lb. .0678- —
tanks, works gal. .33½- —
rectified, NF, dms. incl., l.c.l., works, South gal. .90 - —
whse., N.Y.C. gal. 1.00 - —
Tar acid (see T)
Theobroma (see Cocoa butter).
Thyme, NF, red, cns., dms lb. 1.70 - 3.75
white, cns. lb 1.95 - 4.00
tech., white, cns lb. .40 - 1.85
Tung, dms., c.l., N. Y. lb. .25½ Nom.
l.c.l., same basis lb. .27 Nom.
tanks, N. Y. lb. .24 Nom.
domestic mills lb. .24½- .25½
Turkey red (see Oil, castor, sulphonated).
Turpentine, NF, cns., dms. lb. .20 - .45
Vetiver, Bourbon, cns. lb.15.00 -19.50
Haitian, cns. lb.12.25 -21.00
Java, cns. lb.22.50 -40.00
Wheat germ, 5-gal. dms. gal.10.00 -13.00
White mineral, tech., 50-65 vis., non-ret. dms., c.l., f.o.b., N. Y. gal. .51½- .54½
65-75 vis., non-ret., dms., c.l., same basis gal. .52½- .55
l.c.l., same basis gal. .57½- .58½
N.F., 80-90 vis., non-ret., dms., c.l., same basis gal. .53½- .56½
l.c.l., same basis gal. .58½- .59½
125-135 vis., non-ret., dms., c.l., same basis gal. .59½- .62½
l.c.l., same basis gal. .64½- .65½
145-155 vis., non-ret., dms., c.l., same basis gal. .66 - .68½
l.c.l., same basis gal. .71 - .71½
175-165 vis., non-ret., dms., c.l., same basis gal. .69½- .73
l.c.l., same basis gal. .74½- .75
USP 200-210 vis., non-ret. dms., c.l., same basis gal. .72½- .75
l.c.l., same basis gal. .77½- .78
345-355 vis., non-ret., dms., c.l., same basis gal. .77 - .80
l.c.l., same basis gal. .83 - .85
Wintergreen, USP, nat., Northern, cns lb. 7.15 -14.50
Southern, cns lb. 3.20 -19.50
synthetic (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed, cns. lb. 4.60 - 8.25
Wormwood, cns. lb. 5.50 - 6.85
Ylang-ylang, Bourbon, bots. lb.20.00 -30.00
extra, bots lb.30.00 -40.00
Madagascar bots lb. No stocks.
Oleostearine, bbls. lb. .11¾ Nom.
Olivine aggregate, bulk, c.l., mines. ton. 7.00 - 9.50
crushed 8 mesh, bulk, c.l. works ton.10.00 - —
paper, bgs, c.l., works ton.12.00 - —
Opium, USP, cns. lb.19.20 -19.45
gran., USP, cns. lb.21.65 -21.90
powd., USP, cns. lb.21.65 -21.90
Orange, cadmium lithopone, bbls., frt. alld. E. of Rockies lb. 1.61 - —
Chrome, CP, bbls., divd. N. of Tenn. and N. C., E. of Miss. R., include Davenport, Tenn. and N. C. E. of Minneapolis, Rock Island, St. Louis, St. Paul lb. .31 - —
Chrome orange prices are ½c. higher divd. Ala., Fla., Ga., La. (Shreveport), 1¼c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., 1½c. El Paso, Tex., 2c. Cedar Rapids; Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher divd. Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.
Dinitroanilin toner lb. 1.30 - —
Mineral, American, bbls, l.c.l., works lb. .1835- .1860
Molybdated, bbls. lb. .44 - —
Orthonitroanilin toner, kgs. lb. 1.15 - —
Persian, bbls. lb. .65 - —
Peel, bitter, Haitian, bls. lb. .14 - .16
sweet, bls. lb. .18 - .20
Orris root, Florentine, bls. lb. .35 - .40
powdered, bbls., bxs. lb. .40 - .43
Verona, bls. lb. .23 - .28
powdered, bbls., bxs. lb. .26 - .33



Exchange Brand is the 4-to-1 favorite over all other lemon oils *combined!*

Year after year, Exchange Brand *quality* proves itself in sales. That's because Exchange Lemon Oil comes only from California lemons grown and skillfully processed by Sunkist Growers.

When a little lemon oil goes so far, why risk buying anything but the best?

Sunkist Growers

PRODUCTS DEPARTMENT • ONTARIO, CALIFORNIA

Produced by
Exchange Lemon Products Co. • Corona, California

Distributed in the U.S. exclusively by
DODGE & OLCOTT, INC.
180 Varick St., New York 14, N. Y.
FRITZSCHE BROTHERS, INC.
76 Ninth Ave., New York 11, N. Y.

Exchange
OIL OF LEMON U.S.P.

Orthoaminobiphenyl, dms., c.l., works lb. .32½- —
l.c.l., same basis lb. .33 - —
tanks, same basis lb. .37 - —
Orthoanisidin, bbls. lb. .88 - —
Orthochloroanilin, dms., c.l. lb. .70 - —
l.c.l. lb. .72 - —
Orthochlorobenzaldehyde, dms., works lb. 1.20 —
Orthochloroparanitroanilin dms. dlvd lb. .86 —
Orthochlorophenol, dms., c.l., frt. equald lb. .34½- —
l.c.l., same basis lb. .35½- —
Orthocresol, pure, 30° C., non-ref., dms. c.l. frt. equald lb. .173 —
l.c.l. same basis lb. .176 —
ref. dms., c.l., same basis lb. .17 - —
l.c.l., same basis lb. .17½ —
tanks, same basis lb. .15 —
29°C., ref. dms. c.l., same basis lb. .16 —
l.c.l. same basis lb. .16½ —
tanks, same basis lb. .15 —
25-29°C., non-ref. dms. c.l., same basis lb. .153 —
l.c.l. same basis lb. .156 —
tanks, same basis lb. .140 —
Orthodichlorobenzene, dms., c.l., works, frt. alld. E. of Rockies lb. .12¼- —
l.c.l., same basis lb. .13¼- —
tanks, same basis lb. .10¾- —
Orthonitroanilin, flaked, dms. lb. .54 - .57
powd., dms. lb. .60 - —
Orthonitrochlorobenzene, dms. lb. .20 - .21
Orthonitrobiphenyl, tech., dms., c.l., works lb. .14½- —
l.c.l., works lb. .15 - —
tanks, works lb. .13 - —
Orthonitroparachlorophenol cns lb. .75 —
Orthonitrophenol, bbls, works, frt. equald lb. .94 - —
Orthonitrotoluene dms. c.l. frt alld. lb .10 - —
l.c.l., frt. alld lb. .11 - —
tanks, frt. alld lb. .09 - —
Orthophenetidin dms. works lb 1.00 —
Orthophenylphenol fib dms. works. lb. .20 .44
Ortho-tertiary amylphenol dms., c.l., works lb. 43¾ —
l.c.l., works lb. 46¾ —
tanks, works lb. 41¾ —
Orthotolidin (see Tolidin Base).
Orthotoluidin dms., c.l., works lb .23 - —
l.c.l. same basis lb .24 - —
tanks, same basis lb. .22 - —
Osage orange, crystals, No. 1, bbls., l.c.l lb. .40 - —
extract, liquid No. 1, bbls., l.c.l lb. .19 - —
Ouabain, USP, bots gram 3.00 4.00
Ox bile, extract, powdered, USP 5-lb. lots or more lb. 6.00 —
not extract, powdered 5-lb. lots or more lb. 4.35 —
Oxyquinolin sulphate cns., 100-lb. lots, works lb 4.75 5.00
smaller lots, works lb. 4.92 5.17

P

Pancreas substance, assay 1:75 bots., 5-lb. lots or more lb. 5.75 - —
Pancreatin USP bots lb 2.50 3.00
Papain, powd., African lb. 5.00 - 6.00
Ceylon lb. 4.00 - 4.75
Papaverine, natural or synthetic hydrochloride, USP, cns., 25 oz to 100 oz. lots oz 5.00 —
smaller lots oz 5.55 - 5.20
Sulphate, cns oz. 7.10 - 7.35
Paprika, Roumanian, bgs lb. .32 - .34
Spanish, bgs. lb. .42 - .44
Yugoslavian, bgs. lb. .38 - —
Para-anisidin, dms., works lb. .97 - —
Para-acetylaminobenzal tenyde thiosemicarbazone, dms., frt. adjusted lb. 17.50 -21.00
Para-aminophenol dms. frt. alld lb .97 - .98
Parachloroanilin, dms., c.l., works, frt. equald lb. .75 - —
Parachlorobenzaldehyde, dms., works lb. 1.33 - 1.36
Parachloro-orthonitroanilin, dms., frt. alld lb. .73 - .82
Parachlorophenol, dms., c.l., frt. equald lb. .34½- —
l.c.l. same basis lb. .35½- —
Paracresol, 98% dms., c.l., dlvd lb. .49 - —
l.c.l., dlvd lb. .51 - —
Methylether, cns lb. 1.90 - 2.50
Paracymene, dms. 50-gal. lots or more, works gal 2.50 - —
smaller lots gal. 3.00 - —
Paradibromobenzene, bgs. 500-lb lots lb. .55 - —
Paradichlorobenzene, dms. c.l., works, frt. alld. E. of Rockies lb. .16½- —
l.c.l., same basis lb. .19 - —
Paraffin, crude scale, white, 121°-123°F, ASTM, solid, c.l., ref'y lb. .0660- —
fully refined, 122°-124°F, ASTM, slabs loose, c.l., ref'y lb. .0845- —
125°-127°F, ASTM, slabs loose, c.l., ref'y lb. .0845- —
130°-132°F., ASTM, slabs loose, c.l., ref'y lb. .0855- —
132°-134°F, ASTM, slabs, loose, c.l., ref'y lb. .0855- —
135°-137°F., ASTM, slabs loose, c.l., ref'y. lb. .0855- —

Prices for paraffin in bags and ctns., c.l. 7/10c. per lb higher; 1,000 to 9,999 lbs., 2.7c per lb higher and under 1,000 lbs., 3.7c. per lb. higher

AMP temperatures are an arbitrary 3° F. higher than ASTM.

Paraformaldehyde, 91%, powd., bgs., c.l., frt. alld lb. .15½- —
l.c.l., frt alld lb. .17 - —
flake, bgs., c.l., frt. alld lb. .12 - —
l.c.l. frt alld lb. .13½- —
USP X, fib dms., c.l lb. .198 - —
10,000-lb lots lb. .198 - —
1,000-lb lots lb. .198 - —
smaller lots lb. .208 - —
Paraldehyde, tech., 98%, 55-gal. dms., c.l., works lb. .1385- .1650
l.c.l., works lb. .1485- .1750
tanks, works lb. .1400- .1500
Paranitroanilin, dms., c.l., works, frt. alld lb. .50½- —
l.c.l., works, frt. alld lb. .53½- —
Paranitrochlorobenzene, kgs., works lb. .26 - .27
Paranitrophenol kgs., works, frt. equald lb. .50 - —
Paranitrotoluene, kgs., fib. dms., works lb. .33 - .36
Paraphenetidin, dms., works lb. 1.00 - —
Paraphenylenediamine, redistilled, dms. works lb 2.00 —
tech. refd. dms. same basis lb. 1.10 1.35
Paraphenylphenol, bgs., c.l., works. lb. .37½- —
l.c.l., same basis lb .42 - —
Para-tertiary amylphenol, ctns., c.l., works lb. .26½- —
l.c.l., works lb. .27½- —
tanks, works lb. .25½- —
Para-tertiary butylphenol, bgs., c.l., works lb. .27½- —
l.c.l., same basis lb. .28½- —
Parathion, spray powder, 15% dealers, tins, works lb. .45 - —
tech., dms., works lb. 1.62 - 1.64
Paratoluenesulphonamide, flake, bbls., frt. alld lb. .64 - .66
powd., bbls., works lb. .70 - —
solid, bbls., frt. alld lb. .61 - —
Paratoluidin flake, bbls., frt. alld. lb. .64 - —
solid, bbls., frt. alld lb. .60 - .61
Paris green, dealer, distributor, dms., c.l., works, frt. alld. on 96 lbs or over lb. .36 - .40
l.c.l., same basis lb. .37 - .53
Passion flower herb, bls lb. .21 - .23
Peanut meal, 45% old proc., sacked, mills ton. 77.00 - —
solvent, same basis ton. 75.00 - —
Pectin, citrous, NF, powd. bbls lb 2.05 - 2.06
tech., powd bbls lb 1.80 - —
imported, Danish, ex whse lb. 1.28 - —
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units .08½- .09
Procaine, bulk, 1,000,000 units .08½- .09
Sodium, sterile, bulk, 1,000,000 units. .08½- .09
Pentachlorophenol, dms, c.l., works, frt equald lb. .21 - —
l.c.l., same basis lb. .24 - .29
truckload, 20,000 lbs. min. same basis lb. .21¼ —
Pentaerythritol, tech., bgs., c.l., works lb. .34 - —
l.c.l., works lb. .35 - .36

Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).

Pentane, industrial, tanks, Tex. ref'y gal. .14¼- —

Orthoaminobiphenyl—Petroleum, Fuel Oil, Furnace, Group Three

Pepper, black, Malabar, spot, bgs. lb. .88 - —
red, Gondar, spot, bgs lb. .26 - .28
Japanese, hontaka, bgs lb. .38 - —
birdseyes, bgs., new crop lb. .56 - .57
Mombasa, bgs., ship't lb. .55 Nom.
Nigerian, bgs. lb. .32 - —
Turkish, bgs lb. .27 - .28
Zanzibar, bgs. lb. .55 Nom.
white, bgs. lb. .98 - —
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imported, bls lb. 1.25 Nom.
Pepsin NF 1:3,000 bulk lb. 3.75 3.90
Perchloroethylene dms c.l. or truckloads, frt. alld lb. .11¾- —
dlvd., E. lb. .11½- —
l.c.l., dlvd. ex whse lb. .12½- —
dlvd. E lb. .13½- —
Peru balsam, dms lb. 1.35 - 1.75
Petrolatum, amber, dms., c.l., ref'y. lb. .05 - .05⅝
l.c.l., dlvd lb. .06¾- .07
tanks, refy lb. .03¼- .04⅛
cream, dms., c.l., refy lb. .06⅛- .07⅛
l.c.l., dlvd lb. .08⅛- .08¾
tanks, refy lb. .04⅜- .05⅛
extra, amber, dms., c.l., refy lb. .05¼- .05⅞
l.c.l., dlvd lb. .07 - .07¼
tanks, refy lb. .03½- .04⅜
USP, white, lily, dms., c.l., ref'y lb. .06⅝- .07½
l.c.l., dlvd lb. .08⅞- .09⅛
tanks, refy lb. .04⅞- .06
snow, dms., c.l., refy lb. .07⅛- .07¾
l.c.l., dlvd lb. .09⅜- .09⅝
tanks, refy lb. .05⅜- .05⅞
soft, dms., c.l., refy lb. .06¾- .07¾
l.c.l., dlvd lb. .08½- .08¾
tanks, refy lb. .05 - .05⅝
yellow, soft, dms., c.l., refy lb. .05¼- .05⅞
l.c.l., dlvd lb. .06⅞- .07⅛
tanks, refy lb. .03½- .05⅞

Petroleum, crude, bulk, at wells, California bbl. 1.42 - 3.53
Illinois bbl. 2.69 - 3.02
Kentucky bbl. 2.62 - 3.02
Louisiana-Arkansas bbl. 2.33 - 3.23
Montana bbl. 1.53 2.90
Oklahoma-Kansas bbl. 2.48 - 2.90
Penna. grade, Buckeye, O. bbl. 3.54 - —
middle Penna. district bbl. 4.05 - —
Texas, East bbl 2.90 - —
Gulf Coast lb. 2.63 - 3.23
North, North-Central bbl. 2.48 - 2.90
Panhandle bbl. 2.48 2.90
West bbl. 2.35 2.90
Wyoming bbl. 1.53 2.90
Fuel oil, bunker C, No. 6, East Coast, Baltimore, Md. bbl. 2.25 - —
Boston, Mass. bbl. 2.29 - —
Charleston, S. C. bbl. 2.20 - —
Jacksonville, Fla bbl. 2.18 - —
New York Harbor bbl. 2.25 - —
Norfolk, Va. bbl. 2.23 - —
Philadelphia, Pa bbl. 2.15 - —
Portland, Me. bbl. 2.29 - —
Providence, R. I. bbl. 2.26 - —
Savannah, Ga. bbl. 2.20 - —
West Coast bbl. 1.80 - 2.10
diesel, tanks, refy., California gal. .1625- .133
New York gal. .102 - —
Penna., western gal. .1075- .11
furnace, tanks, refinery, Arkansas, No. 2 gal. .085 - —
No. 3 gal. .0825- —
N. Y. Harbor, No. 2 gal. .098 - —
group 3, No. 1 gal. .08625- .09
No. 2 gal. .08 - .09
No. 3 gal. .07875- .08125
range gal. .0675- .0925

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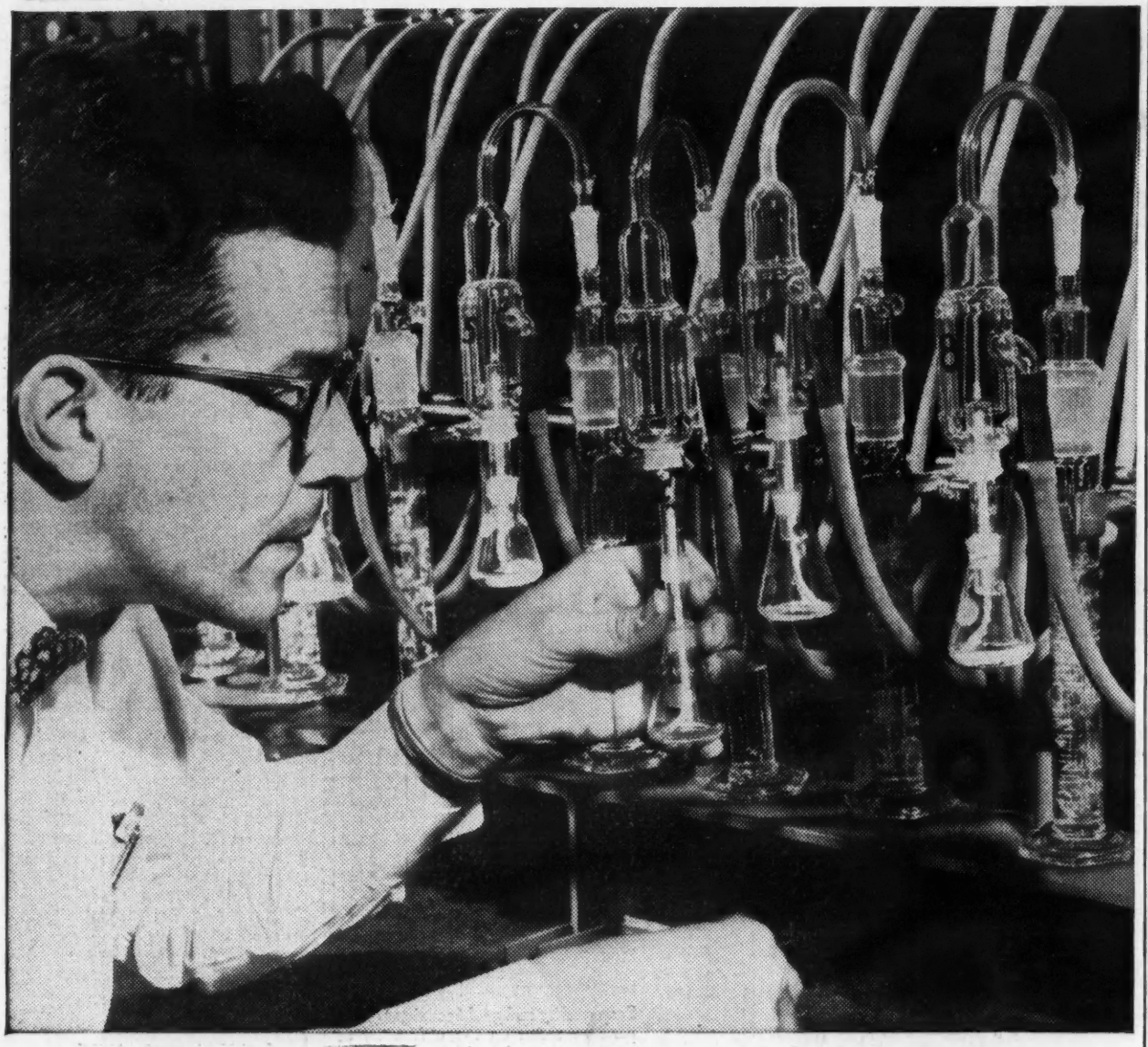
Petroleum, Fuel Oil, Furnace, Penna. Western—Polystyrene

Petroleum, fuel oil, furnace, Pennsylvania western, No. 1 ..gal. .1075- .114
No. 2 ..gal. .104 - .1125
No. 3 ..lb. .105 - .1105
Lacquer diluent, 150°-240° F., b.r., 43°-55° C., m.a.p. tanks, West Coast, ex tax, Los Angeles ..gal. .183 - —
East coast, N. J., N. Y. ..gal. .18 - —
Group 3, benzol-type ..gal. .14125- .14625
toluol-type ..gal. .13125- .13375
Mineral spirits, regular tanks, California, ex tax, San Francisco ..gal. .174 - —
East coast, N. J., N. Y. ..gal. .17 - —
Group 3 ..gal .11875- —
tankwagon, Boston ..gal. .19 - —
Buffalo ..gal. .195 - —
Chicago ..gal. .279 - —
Cleveland ..gal. .22 - —
Newark ..gal. .18 - —
New York ..gal. .18 - —
Philadelphia ..gal. .185 - —
Pittsburgh ..gal. .18 - —
Providence ..gal. .195 - —
specially ref., tanks, refy., Watson, Calif. ..gal. .244 - —
Borger, Tex. ..gal. .24 - —
Houston, Tex. ..gal. .24 - —
Wood River, Ill. ..gal. .2625- —
tank transport, dlvd. N. J. ..gal. .32 - —
dlvd. N. Y. ..gal. .33½- —
tankwagon, N. J., N. Y. dlvd. ..gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J. and N. Y. ..gal. .17 - —
Group 3 ..gal. .12875- —
Petroleum naphtha, cleaners, tankwagon, Newark ..gal. .18 - —
New York ..gal. .18 - —
Philadelphia ..gal. .165 - .17
High solvency (see petroleum solvent, partial aromatic).
V.M.&P., 225°-300°F., b.r., tanks, West Coast, Los Angeles ..gal. .168 - —
Portland, Ore. ..gal. .174 - —
San Francisco ..gal. .173 - —
Seattle, Wash. ..gal. .174 - —
East coast, N. J., N. Y. ..gal. .18 - —
Group 3 ..gal. .12875- —
tankwagon, Boston ..gal. .205 - —
Chicago ..gal. .289 - —
Cleveland ..gal. .23 - —
Newark ..gal. .195 - —
New York ..gal. .195 - —
Philadelphia ..gal. .195 - —
Pittsburgh ..gal. .19 - —
Solvent, partial aromatic, tanks, East Coast, N. J., N. Y., 265° 292°F. b.r., 37° 38°C. m.a.p. ..gal. .26 - .27½
17°-29°C. m.a.p ..gal. .29 - .32½
266°-383°F. b.r., 35°C. m.a.p. ..gal. .29 - —
27°-28°C. m.a.p ..gal. .29 - .31
19°C. m.a.p ..gal. .34 - —
310°-392°F. b.r., 30°-38°C. m.a.p. ..gal. .27 - .32½
17°-19°C. m.a.p ..gal. .35 - .39
350°-425°F. b.r., 32°-34°C. m.a.p. ..gal. .30½- .32½
25°C. m.a.p ..gal. .39½- —
18°-21°C. m.a.p ..gal. .35 - .43½
Petroleum, solvent, rubber, tanks, Cal., ex tax, San Francisco ..gal. .173 - —
East Coast, N. J., N. Y. ..gal. .18 - —
Group 3 ..gal. .12875- —
Stoddard, tanks, East Coast, N. J., N. Y. ..gal. .17 - —
Group 3 ..gal. .12375- —
Pennsylvania, western ..gal. .15 - —
tankwagon, Boston ..gal. .19 - —
Chicago ..gal. .289 - —
Cleveland ..gal. .22 - —
Los Angeles, ex tax ..gal. .173 - —
Newark ..gal. .18 - —
New York ..gal. .18 - —
Philadelphia ..gal. .165 - .17
Pittsburgh ..gal. .18 - —
Sulphonate, oil soluble, 60-62% sulphonic content, non-ret. dms., c.l., works ..lb. .16 - .18¼
l.c.l., works ..lb. .17 - .18½
tanks, works ..lb. .14 - .16½
50-55% sulphonic content, non-ret. dms., works ..lb. .15½- —
l.c.l., works ..lb. .16½- —
tanks, works ..lb. .12½- —
Phenobarbital, USP, dms., 100-lb. lots ..lb. 4.00 - —
Phenobarbital-sodium, USP, dms., 100-lb. lots ..lb. 4.00 - —
Phenol, 90-92% (cresol 8-10%), non-ret. dms., c.l., frt. alld E. of Rockies ..lb. .15¾- —
l.c.l., same basis ..lb. .16½- —
tanks, same basis ..lb. .14 - —
82-84% (cresol 16-18%), non-ret. drums, c.l., same basis ..lb. .15¼- —
l.c.l., same basis ..lb. .16 - —
tanks, same basis ..lb. .13½- —
Phenol, 39° or above, tar distilled, non-ret. dms., c.l., same basis ..lb. .17¼- .17¾
l.c.l., same basis ..lb. .18 - .18½
tanks, same basis ..lb. .15½- —
USP, synthetic, dms., c.l., frt. alld ..lb. .17¾- —
l.c.l., same basis ..lb. .18½- —
tanks, same basis ..lb. .16 - —
Phenolphthalein, USP, or yellow bbls., dms., 2,000-lb. lots ..lb. 1.10 - —
smaller lots ..lb 1.12 - 1.17
Phenothiazin, NF, fib. dms., c.l., frt. adjusted ..lb. .53 - —
over 2,100 lbs., same basis ..lb. .55 - —
less than 2,100 lbs., same basis. ..lb. .57 - —
Phenyl acetate, dms., 100-lb. lots, works ..lb. .50 - —
Salicylate (see Salol)
Phenylacetaldehyde solution, 50%, bots ..lb 2.40 2.70
100% bots ..lb 4.00 4.65
Phenylacetamide 125-lb dms. works ..lb 1.10 - —
smaller dms., works ..lb 1.15 1.10
Phenylalanine, dextro-laevo, dms., works ..lb 27.00 -37.50
Phenylcarbethoxy pyrazolone, 250-lb fib dms., dlvd. E ..lb 3.60 - —
smaller dms., dlvd. E ..lb 4.00 - —
Phenyldiethanolamine, dms., c.l., dlvd E. ..lb .40 - —
l.c.l., dlvd. E ..lb .41 - —
Phenylethanolamine, dms., c.l., works ..lb .69½- —
l.c.l., same basis ..lb .70 - —
Phenylethyl acetate, bots ..lb. 1.35 - 1.95
b-Phenylethylamine, dms., works, 1,000-lb. lots ..lb. 1.10 - —
smaller lots, works ..lb. 1.15 - 1.40
Phenylethyiphenyl acetate, bots ..lb. 3.95 - 4.40
Phenylhydrazin base, CP, bots ..lb. 3.00 - 3.07
Hydrochloride, commercial, kgs., works ..lb. 1.75 - —
purified, bots., works ..lb. 5.17 - —
Phenylmethylpyrazolone (see Methylphenylpyrazolone).
Phloroglucinol, coml., fib. dms., works ..lb 6.40 - —
C.P., bots., fib. dms ..lb.17.00 -17.25
tech., fib., dms works ..lb.10.45 - —
Phosgene, 150-lb. cyls., works ..lb. 27½- —
Phosphate defluorinated (see under Rock, Curacao, Atlantic ports ..ton.45.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 70-68%, b.p.l., c.l., same basis ..long-ton. 4.68½- —
72-70%, b.p.l., c.l., same basis ..long-ton. 5.68½- —
75%-74%, b.p.l., c.l., same basis ..long-ton. 6.68½- —
77%-78%, b.p.l., c.l., same basis ..long-ton. 7.68½- —
finely ground, 65%, b.p.l., basis 30% P_2O_5, minimum, bulk, c.l., mines. short-ton 5.60 - —
68%, b.p.l. basis 31% P_2O_5, minimum, mines. short ton. 5.80 - —
70%, b.p.l. basis 32% P_2O_5, minimum, mines. short-ton. 6.15½- —
plus or minus usual bonus adjustment clause for oil and labor. Prices on entirely pebble 50c. per long ton higher.
Phosphorus, amorphous, red, cs. ..lb. .46 - .47
dms. ..lb. .44 - .45
yellow, cns., works ..lb. .48 - .50
dms., c.l., works ..lb. .40 - —
l.c.l., works ..lb. .43 - —
Oxychloride, dms., c.l., works ..lb. .14 - —
l.c.l., dms., works ..lb. .17 - —
tankcars, works ..lb. .12½- —
Pentasulphide, solid, dms., c.l., works ..lb. .11½- —
l.c.l., dms., works ..lb. .13 - .13½
Pentoxide, dms., c.l., works ..lb. .13½- —
l.c.l., works ..lb. .16½- —
Sesquisulphide, tins, cs., works ..lb. .29 - —
export, dms. ..lb. .31 - .36
Trichloride, dms., c.l., works ..lb. .14 - —
l.c.l., works ..lb. .17 - —
tankcars, works ..lb. .12½- —
Phthalic anhydride, bgs, c.l., works, frt. equald ..lb. .20 - —
l.c.l., same basis ..lb. .21 - —
tanks, same basis ..lb. .19½- —
Phthalimide, 97%-98%, dms. works, frt. alld ..lb. .65 - .70
Phthalylsulphacetamide, fiber dms., ..lb. 5.00 - 5.50
a-Picoline, ret., dms., c.l., works, frt. equald ..lb. .43½- —
l.c.l., works, frt. equald ..lb. .44 - —
b,g-Picoline, 5°, dms., c.l., works. ..lb. .31 - .32½
l.c.l., works ..lb. .32 - .33
Pilocarpine hydrochloride, NF, bots ..oz. 5.25 - —
Nitrate, USP, bots., vials ..oz. 5.10 - 5.20
Pimento, Jamaican, bgs ..lb. .44 - —
Mexican, bgs. ..lb. .38 - —
a-Pinene, tanks, South, works ..gal. .30 - —
Pinetar, retort, dms., incl. c.l., works ..gal. .44 - —
l.c.l., works ..gal. .46 - .50½
tanks, bulk, works ..gal. .35 - —
Pinkroot, bls ..lb. 3.00 - 3.25
Piperazine hexahydrate, French Codex dextro, bots kilo. 8.00 - 8.50
Piperidine, 98%, dms., frt. equald. ..lb. 2.90 - 3.00
Piperonyl butoxide, dms., dlvd. E ..lb. 4.50 - 5.30
Cyclonene, dms., dlvd. E ..lb. 4.20 - 4.50
Pitch, burgundy, domestic, dms., c.l., l.c.l. works 100 lbs. 9.80 -10.25
Coaltar, 140°-150° F., m.p., dms., c.l., works ..ton.41.20 -43.00
Cottonseed, dms. works ..lb. .02¼- .03
Hardwood, paper bgs., c.l., works. ..lb. .02 - —
Linseed, dms ..lb. .06 Nom.
Marine, dms ..lb. .04¼- .05
Petroleum (see Asphalt, petroleum).
Pine, dms., incl., l.c.l., works, South ..100 lbs. 8.25 - —
Soybean, dms., works ..lb. .05 Nom.
Tall, dms., works ..lb. .03¾- .04½
Plaster of Paris (see Gypsum).
Platinum metal, works ..oz.93.00 - —
Pleurisy root, bls ..lb. .45 - .50
Podophyllum resin, NF, dms ..lb. 8.75 - —
Pokeroot, bls ..lb. .19 - .22
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works ..lb. .43 - —
10,000-20,000-lb. lots, works. ..lb. .45 - —
smaller lots, works ..lb. .48 - .50
Tristearate, dms., 20,000-lb. lots, works ..lb. .43 - —
10,000 - 20,000 - lb. lots, works. smaller lots, works ..lb. .48 - .50
Polystyrene, gran., gen'l use, colors, special, bgs., over 23,000 lbs., frt. alld ..lb. .34½- .35½
10,000-23,000-lb. lots, same basis ..lb. .37 - —
2,000-9,999-lb. lots, same basis ..lb. .38½- .43
standard, bgs ..lb. .35½- .36
crystals, gen'l use, bgs., c.l. ..lb. .33½- —
heat resistant, bgs., c.l. ..lb. .34 - .36
Polystyrene in non-returnable fib., dms., ½c. per lb. higher.



He makes sure you get UNIFORMITY with

All Esso Petroleum Solvents are made under the most closely controlled modern refining methods. Backed by continuing research and testing, Esso Solvents are famous for their dependable high quality and performance.

6 good reasons why you can depend on Esso Petroleum Solvents

UNIFORMITY — made in modern refineries from carefully selected crude oil sources.

ECONOMY — there's a storage facility near you for low shipping costs and quick delivery.

CONTROLLED EVAPORATION—available in a wide range of evaporation rates with the precise characteristics to meet *your* needs.

SOLVENCY — Esso aliphatics and Solvesso aromatics cover both high and low solvency ranges.

AVAILABILITY — with water terminals in industrial cities, Esso Solvents are always available in bulk.

MODERN HANDLING METHODS — separate tank storage, pumping lines, tank cars and trucks are used throughout all Esso Solvent handling operations.

Esso

PETROLEUM SOLVENTS

SOLD IN: Maine, N. H., Vt., Mass., R. I., Conn., N. Y., N. J., Pa., Del., Md., D. C., Va., W. Va., N. C., S. C., Tenn., Ark., La.

ESSO STANDARD OIL COMPANY

Boston, Mass.—New York, N. Y.—Elizabeth, N. J.—Philadelphia, Pa.—Baltimore, Md.—Richmond, Va.—Charlotte, N. C.—Columbia, S. C.—Memphis, Tenn.—New Orleans, La.

Poppyseed, Argentine, bgs. lb. .17¾ - —
Dutch, bgs. lb. .18 - —
Polish, bgs. lb. .17¼ - —
Turkish, bgs. lb. .14½ - —
Potash, caustic, regular, flake, 88-92%, dms., c.l., works. 100 lbs. 9.15 - —
l.c.l., works 100 lbs. 10.20 - —
liquid, 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs. 5.05 - —
tanks, same basis 100 lbs. 3.70 - —
solid 88-92% dms., c.l., works 100 lbs. 8.70 - —
l.c.l., same basis, works. 100 lbs. 9.75 - —
Potassium abietate dms., works lb. .25 - .28
Acetate, NF, dms lb. .33 - .36
Bicarbonate, USP gran., dms. lb. .22 - —
powd. dms lb. .24 - —
Bichromate, bgs., c.l., works lb. .15 - —
l.c.l. same basis lb. .15½ .16¾
Potassium bichromate in drums ½c. higher.
Bitartrate (see Cream of tartar).
Bromate, bbls., 1,000 lbs. or more, lb. .50 - .52
25-200-lb lots lb. .55 - .57
Bromide USP gran. bbls. kgs. lb. .34 - —
Carbonate, tech., calcined, bbls., c.l., works 100 lbs. 9.00 - —
l.c.l., same basis 100 lbs. 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
USP, gran., bbls., dms lb. .16½ - .18
powd., bbls., dms lb. .21 - .23
Chlorate, cryst., dms., c.l., works. lb. .10¼ - —
l.c.l., works lb. .11½ - .12
powd., dms., c.l., works lb. .10¾ - —
l.c.l. works lb. .12 - 12½
export, dms., New York lb. .12¾ - .13½
NF gran. dms lb. .24 - 3a
Chloride, USP, cryst., dms. lb. .21 - .23
gran., dms lb. .15 - .17
powd dms lb .24 - .26
Chromate, tech., bgs lb. .50 - .50½
Citrate, USP, gran., dms lb. .41 - —
powder, dms lb 40½ - .41½
Cyanide, dms., 500-lb. lots or more, works lb. .55 - —
smaller lots works lb. .57 - —
Fluoborate, fib. dms., c.l., works. lb. .30 - —
l.c.l., works lb. .31 - —
Fluoride, dms., works lb. .32 - —
Gluconate dms lb. 75 - .79
Glycerophosphate, 75% solution cbys lb. 2.15 - 2.25
Guaiacsulphonate, NF, dms lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb dms. 1 to 100-dm. lots lb. .28½ - .33
Hypophosphite, NF, fib. dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms. lb. 2.15 - —
Manure salt, 22% K_2O, bulk, mines unit-ton. .21 - —
Metabisulphate, gran., dms. lb. .20 - .21
powd., dms lb. .25 - —
Muriate, dom. 50-60% K_2O, bulk, Carlsbad, N. M. unit-ton. .43 - —
Trona, Cal. unit-ton. .53 - —
50-51% K_2O paper bgs., Carlsbad, N. M. ton. 25.75 - —
Nitrate (see Saltpeter).
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .32
Pentaborate, gran., bgs., c.l., works ton. 184.00 - —
bbls., ton lots, ex whse ton. 261.00 - —
smaller lots, ex whse ton. 266.00 - —
Powdered Potassium pentomorate $10.25 per ton higher
Perchlorate, dms., c.l., works lb. .15 - —
l.c.l., works lb. .16½ - —
Permanganate, tech., dms., works lb. .22½ - .23½
USP dms. works lb. .24¾ - .30¼
Persulphate, dms., c.l., works lb. .18 - .19
l.c.l. works lb. .20 - .22
Phosphate, tetrabasic, bbls., works lb. .16½ - .18½
Prussiate, red, kgs lb. .60 - .63
yellow, dms. ton lots lb. .22½ - —
smaller lots lb. .23 - —
kegs lb. .28 - —
Silicate, glass, bgs., c.l., works. 100 lbs. 17.00 - —
l.c.l. 100 lbs. 17.80 - —
solution, clarified, 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms., or more, works 100 lbs 6.55 - —
tanks, works 100 lbs. 5.45 - —
tech., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.35 - —
l.c.l., 5 dms. or more, works 100 lbs. 6.50 - —
tanks, works 100 lbs. 5.00 - —
40.5° Be., 1:2.0, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.20 - 7.60
tanks, works 100 lbs. 6.10 - —
Silicofluoride, bbls., works lb. .09 - .10
Stannate, dms., frt. alld. E lb. .647 - .713
Sulphate, agricultural, 49-51%, K_2O, bulk, works ton. 37.25 - —
NF VII cryst. dms lb .31 - .33
gran., dms. lb. .18½ - —
powder dms. lb. .16½ - .17
Sulphocyanide, NF, cryst. (see Potassium thiocyanate)
Thiocyanate, NF, cryst, dms lb. .85 - .94
tech., works lb. .77 - .79
Titanate, ctrs., c.l., works lb. .14 - —
5-ton lots, works lb. .14½ - —
1-ton lot or less, works lb. .14¾ - —
Potassium-magnesium sulphate bulk, works basis 40% K_2SO_4, 18% MgO ton. 16.00 - —
Potassium-sodium tartrate (see Rochelle salt)
Potassium-titanium fluoride, fib. dms., works lb. .39 - .40
Oxalate, bbls., dms lb. .85 - .95
Potassium-zirconium fluoride, fib. dms., c.l., works lb. .50 - —
l.c.l., works lb. .52½ - .55
Progesterone, USP, bots., 100-gr. lots. gm. .79 - —
Acetate, bots. gm. .70 - —
Procaine hydrochloride, USP, dms., frt. alld lb. 3.10 - 3.40
Propane, commercial grade tanks, group 3 gal. .04½ - —
Propyl acetate, normal, dms., c.l., dlvd. lb. .12¾ - —
l.c.l., dlvd. lb. .13¾ - —
tanks, dlvd lb. .10¾ - —
Gallate, dms., 100 to 2,000-lb. lots, works lb 3.90 - 4.40
Parahydroxybenzoate, USP, dms lb. 2.30 - 2.40
Propylene dichloride, dms., c.l., dlvd. E lb. .0845 - .095
l.c.l., same basis lb. .0950 - .1050
tanks same basis lb. .07 - .08
Oxide, dms., c.l., dlvd. E lb. .19½ - .20½
l.c.l. dlvd E lb. .20½ - .21½
tanks, dlvd. E lb. .17½ - .18½
Propyleneglycol industrial, dms., c.l., dlvd. E lb. .16¼ - —
l.c.l., same basis lb. .17¼ - —
tanks, same basis lb. .14½ - —
USP, dms., c.l., dlvd. E lb. .17¼ - —
l.c.l., same basis lb. .18¼ - —
tanks, same basis lb. .15½ - —
Methylether, dms., c.l., dlvd. E lb. .20 - —
l.c.l., same basis lb. .21 - —
tanks, same basis lb. .18½ - —
Propylthiouracil, bots., 50-kilo lots or more kilo. 55.00 - —
smaller lots kilo. 55.10 - 55.30
Psyllium seed, black, bgs. lb. .80 - —
blonde, bgs. lb. .20 - .22
husks, bgs. lb. .46 - —
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03¾ .04¼
smaller lots lb. .03⅞ 04½
imported, Italian, silk-screen, coarse, bgs., ton lots lb. .03½ - —
fine bgs., ton lots lb. .04 - —
sun dried coarse bgs ton. lots lb. .02½ 04
fine, bgs., ton lots lb. .02½ 04
Pumice in bbls is ½c per lb higher
Pumpkin seed, bgs. lb. .25 - .26
Pyrethrin, synthetic (see Allethrin).
Pyrethrum flowers, fine grd. 0.9% pyrethrins bbls works. lb. .50 - —
powder, 1.3% pyrethrins, bbls., works lb. 71½ - —
liquid (20 to 1) basis 2 grams pyrethrins per 100cc, odorless base, 50 dms., works, gal. 8.35 - —
one to 4 dms., works gal. 8.55 - —
oleoresin, dewaxed, 20%, for aerosol bombs, dms., works lb. 9.90 - 10.15
Pyridin, denaturing, dms., c.l., works and frt. equald. gal. 2.77 - —
l.c.l., same basis gal. 2.80 - —
refd., 2°, non-ret. dms., l.c.l., same basis lb. .95 - —
Pyridoxine hydrochloride, bots., 100-gm. lots gm. .55 - —
Pyrites, Canadian, works long-ton. 3.00 - 9.00
Pyrocatechol (see Catechol).
Pyrogallol, NF lb 3.25 3.43
Pyrophyllite, insecticide grade 200 mesh bgs c.l. mines ton 13.00 13.50
No. 3, 200 mesh, bulk, c.l. mines ton 11.00 —
rubber grade 140 mesh bgs. c.l. mines ton 11.50 12.00
standard, 200 mesh, bulk, c.l., mines ton. 12.50 - —
230 mesh, bulk, c.l., mines ton. 13.50 —
325 mesh, bulk c.l., mines ton. 16.75 —
Standard and No. 3 pyrophyllite in paper bgs. $3 to $3.50 per ton extra.
Pyroxlin scrap, amber, dms., works lb. .20 - —
black, dms., works lb. .12 - —
mixed, mottled, dms., works lb. .11 - —
white, china, ivory, dms., works. lb. .15 - —
dense, opaque, dms., works lb. .12 - .15
translucent pastels, cs., works lb. .14 - —
transparent colorless, dms., works. lb. .25 - —
colors dms., works lb. .14 - —
shavings, amber, cs., works lb. .11 - —
mixed colors, dms., works. lb. .11 - —

Poppyseed—Quinine Sulphate

Q

Quassia chips lb. .17 - —
Quebracho extract, clarified, grd., 70% tannin bgs. c.l., works lb. .16½ .16¾
liquid, 35% tannin, bbls., works, tanks, same basis lb. .08¼ - —
solid, clarif., 64% tannin, bgs., c.l., exdock duty extra lb. .12½ - —
ordinary 63% tannin bgs., c.l. same basis lb. 11.31 64 —
Quercitron extract crystals No. 1, bbls l.c.l lb 40 - —
liquid No. 1 bbls l.c.l lb 19 - —
Quicksilver flasks 76 lbs net flask. 190.00 -192.00
Quinceseed, bgs. lb. 2.00 Nom.
Quinidine NF V cryst. cns. 100-oz. lots oz. 1.15 - —
powd. precip. cns. 100-oz. lots oz. 1.17 - —
Sulphate USP cns. 100-oz. lots oz. .87 - —
Quinine, NF, cns., 100-oz. lots oz. .54 - —
Bisulphate, USP cns. 100-oz. lots oz. 37½ - —
Dihydrochloride USP cns oz. .54 - —
Ethylcarbonate, NF, cns., 100-oz. lots oz. .63½ - —
Hydrobromide NF cns. 50-oz. cns. oz. .47½ - —
Hydrochloride, USP, cns., 100-oz. lots oz. 47½ - —
Phosphate NF cns. 100-oz. lots oz. .61 - —
Salicylate, NF, cns., 100-oz. lots oz. .55 - —
Sulphate, USP, cns. 100-oz. lots oz. .42 - —

Proved through the years

Time is the test of dependability. Behind Nialk Chemicals are more than fifty years of experience in meeting strict specifications.

a typical example...

NIALK CAUSTIC POTASH: Railroad signals and navigation lights must give instant, peak performance in all kinds of weather. NIALK Caustic Potash sees that they do. It "weatherproofs" electric cells, assures dependable current even at sub-zero temperatures.

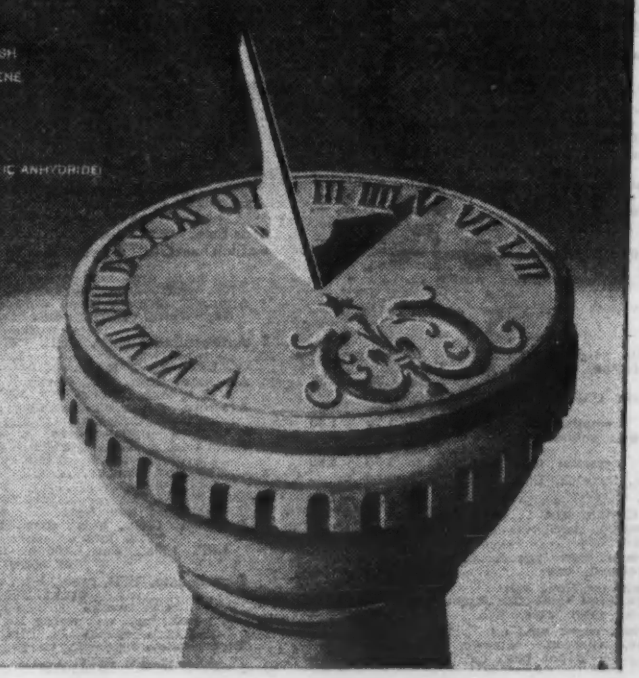
The quality of this and other NIALK chemicals—today as in the past—is the result of broad research, strict quality control and a knowledge of the needs of industry.

NIAGARA ALKALI COMPANY

60 East 42nd Street, New York 17, New York

Nialk

LIQUID CHLORINE
CAUSTIC POTASH
CARBONATE OF POTASH
PARADICHLOROBENZENE
CAUSTIC SODA
TRICHLOR(ethylene
NIAGATHAL (TETRACHLORO PHTHALIC ANHYDRIDE)



Quinine and Urea Hydrochloride—Sodium Sulpha Drugs

Quinine and Urea hydrochloride NF, cns oz. .56 - —
Quinolin, dms., c.l., frt. equald lb. .50¾- —
l.c.l., same basis lb. .51¼- —
tanks, same basis lb. .50 - —

R

R salt, paste, 100% basis, dms., frt alld lb. .83 - —
powd., basis 100%, frt. alld lb. .88 - .93
Red, BON acid maroons, pure, bbls lb 1.75 - —
resinated, bbls lb 1.50 - —
arylid, deep shades, bbls lb 3.60 - —
light shades, bbls lb 2.75 - —
maroon, bbls lb 3.60 5.90
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 - —
light shade, same basis lb 4.00 - —
medium shade, bbls, same basis lb 4.25 - —
medium light shade bbls., same basis lb 4.05 - —
orange shade, bbls, same basis lb. 3.95 - —
Lithopone, deep shade, bbls., same basis lb. 1.93 - —
light shade, bbls, same basis lb. 1.70 - —
maroon shade, bbls, same basis lb. 2.05 - —
medium shade, bbls same basis lb 1.85 - —
medium-light shade, bbls., orange-red shade, bbls., same basis lb 1.64 - —

Red cadmium lithopone all shades, in smaller pkgs., 5c. per lb higher; all prices are 1c per lb higher ex whse Los Angeles and San Francisco

Carmine No 40 (see Carmine).
Dyes (see Dyes coaltar)
same basis lb. 1.77 - —
Eosin toner, bbls., works lb. 1.60 - —
Indian, dom., pure, bgs., Bethlehem, Easton, E St. Louis, N Y lb. .12¾- —
Iron oxide, natural, 75%-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley, O., Easton, Pa., East St. Louis lb. .06 - —
synthetic, 98% ferric oxide, bgs., c.l., works lb. .12¾- —
l.c.l., works lb. .13 - —
Lake C toner, alizarin, bbls., works lb 1.10 1.20
Lithol, toner, bbls., works lb. .79 - —
rubine toner, pure, bbls., works lb 1.50 - —
resinated, bbls., works lb 1.40 - —
Virginia-type, bbls, works lb 1.40 - —
Maroon toner, MNPT, kgs., works, lb. 3.60 - —
10,000-lb. lots, works lb. 4.22 - —
smaller lots, works lb. 4.24 - —
Metallic, bbls., c.l., works lb. .02½- —
l.c.l works lb. .02¾- —
Oxide (see Red iron oxide).
Persian gulf, bgs, c.l. works lb. .06¾- —
l.c.l. works lb. .07 - —
Para toner, bbls lb. .95 - —
Chlorinated kgs lb 1.10 1.15
Phloxin toner (see Red eosin toner).
Rhodamine, molybdated, PMA, kegs lb 5.35 - —
tungstated, PTMA, worms, kegs, lb. 6.15 - —
Spanish, oxide, bbls., c.l., ex dock lb. .05¾- —
l.c.l., ex dock lb. .06 - —
ex whse., New York lb. .06½- —
Toluidin toner, deep shades, kgs., works lb. 1.50 - —
light shades, kgs., works lb. 1.50 - —
Turkey, bbls., works lb. .60 - —
Tuscan, bbls., frt. equald lb. .24½- .25
Venetian, 15%, bgs., works lb. .0350- .037
20%, bgs., works lb. .0475- —
25%, bgs., works lb. .0525- —
30%, bgs., works lb. .0550- —
35%, bgs., works lb. .0575- —
40%, bgs., works lb. .0625- —
Vermilion, Amer., bbls lb. .32 - —
Quicksilver, ctns lb. 3.80 - —
Watchung-type, bbls lb 1.95 - —
Red KB base (see Chloro (4-2-amino-toluene).
Red precipitate, NF, powd., fib dms lb. 4.37 - 4.41
Red saunders, NF, powd., bbls lb. .35 - .40
Rennin, NF, powder lb. 6.25 - —
Resorcinol, tech. grade, dms., c.l., works lb. .77½- —
l.c.l., works lb. .78½- —
USP, cryst., dms., works lb. 2.75 - —
powd., dms., works lb. 2.95 - —
Monoacetate, NF, dms. lb. 3.25 - 3.45
Rhatany root, bgs lb. .15 - .16
Rhodinol, 5-lb. cans lb. 25.00 -36.00
Rhubarb root, China, whole, cs lb. .75 - .85
powd., bbls. lb. .90 - .95
India, whole, bgs lb. .35 - .40
powdered, bbls. lb. .43 - .45
Riboflavin USP bots., dlvd kilo. 100.00 - —
readily soluble, bots. dlvd kilo. 100.00 - —
Rice bran, concentrate, dms., Cedartown, Ga lb. .70 - —
Rochelle salt, USP, gran., powd., dms., c.l. lb. .32½- —
5,000-lb. lots, dms., c.l. lb. .32½- —
smaller lots lb. .33½- .36¼
Rosin, gum and wood (see Naval Stores, Protective Coatings market).
Rotenone, CP, bbls., works lb. 20.00 - —
tech., bbls., works lb. 16.50 - —
Rottenstone, bgs., 5 ton lots, ex-whse lb. .03 - —
ton lots, same basis lb. .04 - —
Rutin, NF, fib, dms., 25-kilo lots, kilo. 25.00 - —
10 to 25-kilo lots, fib, dms kilo. 25.00 -30.00
1 to 10-kilo lots fib dms kilo 30.00 - —
Ryania, 100%, powd., bgs., works lb. .20 - —

S

Sabadilla seed, powd., bbls lb. .49 - .49½
activated, ground with lime, bbls lb. .35 - .36
Saccharin, USP, gran., soluble, dms., 1000-lb lots lb 1.60 - —
smaller lots lb 1.70 - 1.80
powd., soluble, insoluble, dms., 1000-lb. lots lb 1.65 - —
smaller lots lb 1.75 - 1.95
Saffron, Spanish, USP, tins lb. 25.00 - —
Safrol, dms lb. .85 - 1.10
Sage, Cretan, bgs. lb. .11 - —
Dalmatian, bgs. lb. .43 - —
Italian, bgs. lb. .15½- .16
Sago flour, raw, bgs lb. .07¼- .07½
refined, bgs lb. .08¾- .09¼
Sal soda (see Soda cal)
Powdered salol, 25c higher.
Salol NF gran, bbls., kgs. lb. 1.10 - —
Salt, rock, paper bgs., c.l. 100 lbs. .98 - —
Table, vacuum, common, fine, paper bgs., c.l. 100 lbs. 1.12 - —
Saltcake, dom., bulk, works, basis 100%, Na_2SO ton. 19.00 - —
Saltpeter, cryst., bbls., 10-ton lots, 100 lbs 14.40 - —
smaller lots 100 lbs 14.65 -14.90
gran., bbls., 20-ton lots, 100 lbs. 9.75 - —
smaller lots 100 lbs 11.10 -11.50
powd., bbls, 20-ton lots 100 lbs 10.75 - —
smaller lots 100 lbs 12.00 -12.50
NF, gran., dms lb. .09¾- .11¾

Saltpeter in bags, 50c. per 100 lbs. less; in kegs $1 more

Sandalwood chips, East Indies, bgs., lb .65 - .66
powd., dms lb .75 - .76
Sanguinarine nitrate, bots oz 4.75 5.50
Santonin, NF, dom, cryst., powd., dms., cns lb 76.50 -80.00
imported, cryst., powd., cns lb 76.50 -80.00
Saponin, No. 1, 100-lb dms. lb. 2.75 - .
Sarsaparilla root, dom, bls lb .45 - .50
imported, Honduras, bls. lb. .45 - —
Mexican, bls lb. .35 Nom.
Sassafras root bark, ord., bls lb. .50 - —
select, bls lb. .65 - —
Schaeffer's salt, paste dms., frt. alld., basis 100% lb. .85 - .95
powder, bgs., frt. alld lb. .95 - —
Scopolamine hydrobromide, USP, bots oz. 12.25 -12.50
Seidlitz mixture, bbls., 5,000-lb. lots lb. 30½- —
smaller lots lb 31 .32
Selenium, powd., dms., dlvd. lb. 5.00 - 6.00
Senega root, bls lb. 2.30 - 2.40
Senna leaves, Alex., whole and half, bls lb. .19 - —
siftings lb. .17 - —
Tinnevelly, No. 1, bls lb. .17 - .19
No. 2, bls. lb. .13 - .15
No. 3, bls. lb. .11 - .13
powdered, bbls., bxs lb. .18 - —
pods, bls. lb. .14 - —
Serpentaria root, bls lb. 4.85 - 5.00
Sesame seed, Nicaragua hulled, ship't, bgs lb. .35 - —
natural, bgs. lb. .23 - .24
Salvadorian, natural lb. .21 - .22
Shellac, bleached, donedry, bgs., 1,500-lb. lots lb. .49 - —
bbls., 1,500-lb. lots lb. .50 - —
kgs., 1,500-lb. lots lb. .52 - —
refined, bgs., 1,500-lb. lots lb. .59 - —
bbls., 1,500-lb. lots lb. .60 - —
kgs., 1,500-lb. lots lb. .62 - —

Bonedry shellac prices for less than 1,500-lb lots, 1c per lb higher for all packages.

Lemon, No. 1, bgs., 10-bg. lots lb. .38½- .39
No. 2, bgs., 10-bg. lots lb. .37 - —
Superfine, bgs., 10-bg. lots lb. .35 - .36
TN, bgs., 10-bg. lots lb. .33 - .34

Shellac in 1 to 9 bg. lots, 1c. more

Shingle stain oil (see Oil, shingle stain).
Silica, amorph., dry grd., 325 mesh, bgs., c.l., works ton. 25.00 - —
l.c.l., works ton. 30.00 -40.00
hard-quartz, 99½, 325 mesh, bgs., c.l., works ton 20.00 —
l.c.l., works ton 25.00 -30.00
140 mesh, bgs., c.l., works ton 15.00 - —
l.c.l., works ton 20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .16 - —
l.c.l., works lb. .20 - .28½
Silver bullion, ingots, cs lb. .85¼- —
Cyanide, fib dms., 2,500-oz. lots oz. .77½- —
1,000-oz. lots oz. .77⅝- —
500-oz. lots oz. .77⅞- —
100-oz lots oz. .78½- —
Nitrate, CP, crystals, bots., 2,500-oz. lots oz. .54¾- —
1,000-oz. lots oz. .55 - —
500-oz. lots oz. .56½- —
250-oz. lots oz. .57 - —

USP granular silver nitrate, 4c. per oz. higher

Proteinate, mild, USP, bots., dms., 1,000-lb. lots oz. 1.05 - —
strong, NF, bots., dms. 1,000-oz. lots oz 1.00 - —
Skullcap herb, Eastern, bls lb. .50 - .65
Western, bls lb. .30 - .35
Slate flour, bgs., c.l., works ton 9.55 -13.00
l.c.l., ex whse ton. 21.00 -27.35
Soapbark, whole, bls. lb. .28 - .30
crushed, bls., bbls. lb. .32 - .33
powd., bbls lb. .35 - .37
Soda ash, dense, 58% paper bgs., c.l., works 100 lbs. 1.75 - —
l.c.l. stock points 100 lbs. 2.85 - 4.62
bbls., c.l., works 100 lbs. 2.30 - —
l.c.l. stock points 100 lbs. 3.35 - 4.12
bulk, c.l., works 100 lbs. 1.45 - —
light, 58%, paper bgs., c.l., works 100 lbs. 1.65 - —
l.c.l. stock points 100 lbs. 2.75 - 4.52
bbls., c.l., works 100 lbs. 2.20 - —
l.c.l. stock points 100 lbs. 3.25 - 5.02
bulk, c.l., works 100 lbs. 1.35 - —
Soda, caustic, flake, powd., 76%, dms., c.l., works, frt. equald. 100 lbs. 4.10 - —
l.c.l., stock points 100 lbs. 5.30 - —
liquid, 50%, sellers tanks, works, dry basis 100 lbs. 2.55 - —
rayon-type tanks works, dry basis 100 lbs 2.65 - —
70% sellers' tanks, works, dry basis 100 lbs. 2.65 - —
rayon type, tanks, works, dry basis 100 lbs 2.70 - —
solid, 76%, dms., c.l., works 100 lbs. 3.70 - —
l.c.l., stock points 100 lbs. 4.90 - —
Sal, bgs., c.l., works 100 lbs. 1.40 - —
l.c.l., works 100 lbs. 1.70 - —
Soda-lime, USP, dms lb. .23 - .25
Sodium acetate, anhyd., bgs., c.l., works lb. .12 - —
l.c.l., dms lb. .12¾- —
NF, gran., dms., works lb. .12½- .16½
Alginate, refined, bbls., works lb. .83 - —
NF, white, powd., dms., ton lots, works lb. .87 - 1.30
Antimoniate, bbls., c.l., dlvd. E lb. .26½- —
l.c.l., dlvd. E lb. .28 - —
Arsenate, dms., c.l., works lb. .12½- —
l.c.l. dms. works lb. .13¾- —
Arsenite, dms., c.l., works lb. .13½- —
l.c.l., dms works lb. .14¼- .15¼
solution, dms., works gal. .70 - 1.10
Ascorbate, dms., 25-50 kilo lots kilo. 21.00 - —
10-kilo lots kilo. 21.35 - —
5-kilo lots kilo. 21.75 - —
1-kilo lots kilo. 22.00 - —
500-gram lots, bots kilo. 22.50 - —
Benzoate, tech., bbls., dms., 100-lb. lots or more lb. .39 - —
USP, bbls., dms. 100-lb. lots, or more lb. .46 - —
Bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.70 - —
l.c.l., works 100 lbs. 3.70 - —
powd., bgs., c.l., works 100 lbs. 2.30 - —
l.c.l., works 100 lbs. 3.30 - —
Bichromate, bgs., c.l., works lb. .11½- —
l.c.l., same basis lb. .12 - .13¼
Sodium bifluoride, bbls., c.l., works, frt. equald lb. .17½- —
l.c.l., same basis lb. .1790- —
Bisulphate, bulk, c.l., works 100 lbs. 2.00 - —
dms., c.l., works 100 lbs. 2.65 - 3.85
l.c.l., works 100 lbs. 3.05 - 3.65
Bisulphite anhyd., bgs., c.l., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - —
solut. 35° bbls., c.l., works 100 lbs 1.40 - —
l.c.l., works 100 lbs. 1.80 - —
Borate (see Borax).
Bromide, USP, bbls., kgs., works lb. .34 - .35
Cacodylate, NF, dms., jrs lb 8.52 - —
Carbonate, anhydrous (see Soda ash).
crystalline decahydrated (see Soda sal).
monohydrated, bgs., c.l., works 100 lbs. 2.90 - —
l.c.l., works 100lbs. 3.30 - —
Carboxymethyl cellulose (see CMC).
Chlorate, cryst., dms., c.l., works, lb. .08¾- —
l.c.l., works lb. .10¼- .11
Chloride, tech. (see Salt).
USP, dms. lb. .05 - .12
Chlorite, tech., dms., works lb. .58 - .73
Chloroacetate, tech., dms., c.l., works lb. .24 - —
l.c.l., works lb. .25 - .26
Chromate, dms., c.l., works lb. .13¼- —
l.c.l., same basis lb. .13¾- .15
Citrate, anhyd., dms lb. .60 - .65
USP VIII gran, dms. lb. .26 - .30½
USP XIV gran., dms. lb. .29½- .34

Sodium citrate USP powd prices ½c. higher.

Cyanate, dms., 1,000-lb. lots, works lb. .85 1.10
smaller lots, works lb. 1.00 1.25
Cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots lb. .178 - —
over 1,000-lb. lots lb. .188 - —
100-lb. to 1,000-lb. lots lb. .198 - —

Granular sodium cyanide 1c. higher.

Diacetate, 33-35% acidity, 250-lb. dms., works lb. .14 - —
l.c.l. lb. .14¾- —
anhydrous, dms., c.l., works lb. .17 - —
l.c.l lb. .17¾- —
Fluoride, white, 97%, bbls., c.l., works lb. .1250- —
l.c.l., works lb. .1290- —
Fluoracetate, monobasic, 8-oz. tins, 50 to a case, works lb. 12.00 - —
2 to 25 tins to case works lb. 12.00 -16.50
1 oz. tins, 16 to 64 to case, works lb. 16.50 -21.00
Formate, bgs., c.l., dlvd. E 100 lbs. 7.60 - —
l.c.l., works 100 lbs 8.65 - —
Gentisate, 100-lb fib dms lb 8.50 - —
Gluconate, technical, bgs. lb. .35 - —
refined, dms. lb. .80 - .83
Glutamate, monobasic, dms., c.l. lb. 1.70 - —
Glycerophosphate, NF, cryst., bbls lb. 2.10 - 2.25
powder, bbls lb. 2.15 - 2.30
solution, 75%, cbys lb. 1.45 - 1.60
Hydride, dms., works lb. 2.00 - 3.00
Hydrosulphide (see Sodium sulphydrate).
Hydrosulphite, dms., c.l., frt. alld lb. .23 - —
l.c.l., frt. alld. lb. .23½- —
Hydroxide, tech. (see Soda caustic).
NF, pellets, 100-lb dms. 1 to 100-dm. lots lb. .18½- .23
Hypophosphite, NF, dms., ton-lots or less lb. .93 - .98
Hyposulphite, photo grade, bgs., c.l., works 100 lbs. 4.50 - 4.75
l.c.l., same basis 100 lbs. 5.00 - 5.05
pea crystals, bgs 100 lbs. 4.50 - —
gran., bgs., c.l., works 100 lbs. 4.75 - 5.00
tech., bgs., c.l., works 100 lbs. 4.50 - —
l.c.l., works 100 lbs. 4.90 - 6.90

Sodium hyposulphite crystals in bbls. 50c. higher.

NF (see Sodium thiosulphate).

Iodide, USP, bots., dms lb. 2.80 - 2.92
Lactate, edible, 50%, dms., cbys., works lb. .21½- —
60% dms, cbys., works lb. .26½- —
tech., 50%, dms., cbys., works, lb. 16¼- —
Laurylsulphate, dms., c.l., dlvd lb. .24 - —
l.c.l. dlvd. lb. .25 - —
tanks, dlvd. lb. .23 - —
Metabisulphite (see sodium bisulphite).
Metaborate, octahydrate, gran., bgs., c.l., works ton. 78.50 - —
l.c.l., ex whse ton. 124.50 -129.50

Sodium metaborate, octahydrate in bbls., $24.50 per ton higher.

tetrahydrate, c.l., bbls., works, ton 199.50 - —
Metallic, bricks, bbls., works lb. .17 - .19
tanks, works lb. .16 - —
Metanilate, bbls., frt. alld lb. .62 - —
Metasilicate, anhyd., bgs., c.l., works 100 lbs. 4.85 - —
l.c.l., works 100 lbs. 5.20 - 7.10
dms., c.l. 100 lbs. 5.25 - —
l.c.l., 100 lbs. 5.60 - 6.00
Molybdate, crys., bbls., works lb. .75 - .85
powd., anhy., dms., works lb. .85 - .92
Monohydrate (see Sodium carbonate, monohydrated).
Naphthionate, bbls. lb. .70 - —
Nitrate, crude, dom., bgs., c.l., works ton. 47.00 - —
bulk, c.l., works ton. 43.50 - —
imp., 100-lb. bgs., c.l., Atl. Gulf, Pac., whse ton. 53.00 - —
bulk, c.l., same basis ton. 49.50 - —
Nitrite, USP bbls., c.l., works, frt. equald lb. .0775- —
l.c.l., same basis lb. .0925- .18
Orthosilicate, conc., dms., c.l., works 100 lbs. 6.00 - —
l.c.l., works 100 lbs. 6.35 - 6.75
hydrated, flake, bbls., c.l., works 100 lbs 4.75 - —
l.c.l., works 100 lbs. 5.50 - —
Oxalate, 88%, bgs., works 100 lbs. 10.85 - —
Para-aminobenzoate, dms., 1,000-lb. lots or more lb. 2.40 - —
smaller lots lb. 2.45 - 2.50
Para-aminosalicylate, dms., 1,000-lb. lots, frt. adjusted lb. 3.75 - —
smaller lots, same basis lb. 3.80 - 4.25
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald. lb. .25½- —
l.c.l., same basis lb. .26½- .28½
Pentachlorophenate, pellets, bgs., c.l., same basis lb. .25 - —
l.c.l., same basis lb. .26 - .28
Pentachlorophenate, powdered, bgs., c.l., same basis lb. .24 - —
lb. .24 - —
l.c.l., same basis lb. .25 - .27

Pentachlorophenate 20,000 lbs. min truckloads ¼c. per lb. over carlot prices.

Sodium pentahydrate, bgs., c.l., works, frt. equald lb. 4.00 - —
l.c.l., bgs., works 100 lbs. 4.35 - 4.55
dms., c.l., works 100 lbs. 4.80 - —
l.c.l., works 100 lbs. 5.15 - 5.65
Perborate, USP, tech., bbls., c.l., works lb. .193 - —
l.c.l., works lb. .198 - —
Peroxide, dms., c.l., dlvd, E. of Miss lb. .1860- —
l.c.l., same basis lb. .1910- .2010
Phenolsulphonate, USP (see gran., dms lb. .44 - .45
powd., dms lb. .47 - .48
Phosphate, dibasic, anhyd., bgs., c.l., frt., equald 100 lbs. 7.45 - —
l.c.l., works 100 lbs. 7.85 - —
USP, dried powd., bgs., dms., works lb. .19 - .20½
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.05 - —
l.c.l., frt. equald. 100 lbs. 7.25 - —
monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.45 - —
l.c.l., frt. equald 100 lbs. 8.90 - —
tribasic, cryst., bgs., c.l., frt. equald 100 lbs. 4.20 - —
l.c.l., frt. equald 100 lbs. 4.60 - —

Sodium phosphates in dms. 60c higher than bgs.

Prussiate, yellow, bgs., 10-ton lots. lb. .13½- —
smaller lots lb. .14 - —
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs. 10.75 - —
ferric, dms., 1,500-lb. lots, works. lb. .31 - —
smaller lots, works lb. .32 - —
tetrabasic, anhy., bgs., c.l., works, frt. equald 100 lbs. 7.90 - —
l.c.l., frt. equald 100 lbs. 8.10 - —
Salicylate, USP, dms. lb. .68 - —
Sesquicarbonate, bgs., c.l., works. 100 lbs. 2.10 - —
l.c.l., dlvd., zone 1 100 lbs. 3.85 - 4.10
zone 2 100 lbs. 4.10 - 4.35
zone 3 100 lbs. 4.40 - 4.65
zone 4 100 lbs. 5.10 - 5.35

Sales zones are: (1) All States E of Miss. R. and N of south bound of Ky. and Va.; Ala., La., and Miss. south of 31° Tex. E. of 100°; S of 31° Fla.; also Me., N. H. and Vt., in which there are special county zones, Davenport, Ia and St. Louis; (2) Ark. E of 98° Ga.; Iowa (except Davenport) Minn., Mo (except St. Louis) Nebr., E of 98° N. C. S. C., Tenn and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala. La and Miss No of 31°; (3) Ark. W of 98° Kan. Neb W of 98°; N. D. Okla. S. D. Tex. W of 100° (including Wichita Falls excluding El Paso); (4) Ariz. Colo. Idaho Mont., Nev., N. M., Utah Wyo. and El Paso Tex.

Sesquisilicate, hydrated, dms., c.l., works 100 lbs. 4.90 - —
l.c.l., works 100 lbs. 5.25 - 5.65
bgs., c.l., works 100 lbs. 4.50 - —
l.c.l., bgs., works 100 lbs. 4.85 - 6.75
Silicate, liquid, 40° 1:3.2, turbid, dms., c.l., works 100 lbs. 1.35 - —
l.c.l., works 100 lbs. 1.70 - 2.30
tanks, works 100 lbs. 1.00 - —
47°, turbid, 1:2.9, dms., c.l., works 100 lbs. 1.95 - —
l.c.l., dms., works, 100 lbs. 2.55 - 2.80
tanks, works 100 lbs. 1.60 - —
52°, turbid, 1:2.4, dms., c.l., works 100 lbs. 2.30 - —
l.c.l., works 100 lbs. 2.65 - 3.05
tanks, works 100 lbs. 1.95 - —
solid, 1:3.2, bgs., works ton 57.50 - —
Silicofluoride, bgs., c.l., works lb. .07 - —
l.c.l., works lb. .07 - .08
Sodium silicofluoride in dms., 4/10c. higher.
Stannate, dms., works, frt alld. E lb. .478 - .532
Stearate, tech., dms., works lb. .40 - —
USP, dms, works lb. .70 - .75
Sulphanilate, bbls., works lb. .22 - —
Sulphate, NF, VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., works, frt. alld. to $10. 100 lbs. 2.35 - —
l.c.l., works, same basis 100 lbs 2.50 3.00
rayon grade, bgs., c.l., works, ton 29.00 - —
l.c.l., works ton. 35.00 - —
USP, cryst, fib dms lb. .17½- .18
gran., fib dms lb. .17½- .18
Sulphide, flake, dms., c.l., works, E., frt. equald lb. .05¼- —
l.c.l., same basis lb. .05¾- —
fused, bbls., c.l., works, E., frt. equald lb. .04¾- —
l.c.l., same basis lb. .05¼- —
Sulphite, anhyd., bgs., c.l., works. 100 lbs. 3.00 - —
l.c.l. same basis 100 lbs. 3.50 - —
powder, bbls., c.l., works 100 lbs. 7.25 - —
l.c.l., works 100 lbs. 7.50 - —
Sulphocyanide, CP (see Sodium thiocyanate).
Sulphydrate, flake, 70-72%, dms., works, c.l lb. .06½- —
l.c.l., works lb. .07 - —
liquid, 40-44%, tanks, works, basis 100% ton. 110.00 - —
Tetraborate (see Borax.)
Tetrasulphide liquid, 40%, dms., c.l., works lb. .03½- —
l.c.l., works lb. .04 - —
Thiocyanate, CP, dms lb. .55 - .65
tech., dms., works lb. .377 - —
Thiosulphate, NF, cryst., bbls lb. .12½- —
tech (see Sodium hyposulphite).
Titanate, ctns., c.l., works lb. .10½- —
5-ton lots, works lb. .10¾- —
1 ton or less, works lb. .11 - —
Trichloroacetate, 99% 100-lb. dms., c.l., frt. alld., E lb. .37½- —
l.c.l., frt. adjusted, E lb. .39½- —
50-lb. dms., c.l., frt. alld., E. lb. .38 - —
l.c.l., frt. adjusted, E lb. .40 - —
90%, 10-lb. cns., c.l., frt. alld., E lb. .44 - —
l.c.l., frt. adjusted, E lb. .46 - —

Prices West of the Rockies are 1¼c. per pound higher.

Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
l.c.l., same basis 100 lbs. 8.45 - —
Trisilicate, powd., 1:32.2, bgs., c.l., works 100 lbs. 8.65 - —
l.c.l., works 100 lbs. 9.40 -12.80
dms., c.l., works 100 lbs. 9.05 - —
l.c.l., works 100 lbs. 9.80 -10.25
Tristearate, fib, dms., 20-000-lb. lots, works lb. .33 - —
10,000 to 20,000-lb. lots, works. lb. .35 - —
smaller lots, works lb .38 - .40
Tungstate, tech., kgs., dlvd. E lb. 2.40 - —
Sodium-ammonium phosphate, bbls., works, frt. equald lb. .23 - —
Sodium-carboxymethylcellulose (see CMC.
Sodium-cinchopnen (see Cinchophen-sodium).
Sodium-formaldehyde sulphoxylate, dms., c.l., dlvd lb. .23½- —
l.c.l., same basis lb .24 - —
Sodium sulpha drugs (see Sulpha name).

Sodium-zirconyl sulphate, fiber dms., 1,000-lb lots or more works lb. .28 - —
less than 1,000-lb lots, same basis lb. .30 - —
Solvent naphtha, coaltar, refined, tanks, works gal. .31 - .32
high flash, tanks, works gal .31 .32
petroleum (see petroleum solvent, partial aromatic).
Sorbitan monostearate, fib, dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb. lots, works, lb. .34 - —
smaller lots, works lb. .37 .39
Sorbitol cryst pellets, dms., c.l., works lb .30 —
1 to 5-ton lots, works lb .32 .33
powd., dms., 1 to 5-ton lots, works lb .38 .39
Solution, commercial, aqueous, dms., c.l., works lb. .24½- —
ton lots works lb .25 —
smaller lots, works lb. .25¼- —
tanks works lb .23¼ —
regular, 70%, aqueous, dms., c.l., works lb. .16 - —
ton lots works lb. .16¾ —
smaller lots, works lb. .17 - —
tanks, works lb. .15 —
Soybean meal, 44% bulk, Decatur ton.75.00 Nom.
protein, chemically isolated, 50,000 to 60,000-lb. lots, dlvd, lb. .23 - —
20,000 to 40,000-lb lots, same basis lb. .23¼- —
100 to 20,000-lb. lots, same basis lb. .23½- —
mechanically refined, bgs., 40,000 lb lots same basis lb. .0605- —
20,000-lb. lots, same basis lb. .0620- —
smaller lots, same basis. lb. .0635- —
Sparteine sulphate, cns oz. .85 1.25
Spearmint leaves, bls lb. .75 - —
Spruce extract liq, reg tanks, works lb. .01¾- —
powd., super, bgs., c.l., works, lb. .05¼- —
l.c.l., works lb. .05½- —
Squill, red fortified, powd., bbls., boxes lb 1.60 —
white, bls lb .12 .15
powd., bbls, bxs lb .18 .21
St John's bread, edible, bls lb. .13 .15
Stannous chloride (see Tin chloride stannous)
Star root (see Helonias root)
Stargrass root (see Aletris root)
Starch, corn, pearl, paper bgs, c.l., 100 lbs. 7.14 - —
l.c.l. 100 lbs 7.29 - —
powd., paper bgs., c.l 100 lbs 7.26 - —
l.c.l. 100 lbs 7.32 - —
Prices for corn starch in cotton bags 25c. per 100 lbs higher.
Potato, dom., Idaho, bgs., c.l., works lb. .08½- —
Maine, bgs., c.l., works lb. .05¾- .06
l.c.l., spot lb. .07¾- .08¼
Rice, c.l., bgs lb. .16 .17
Wheat, bgs. lb. .0755 .0780
Stavesacre seed bgs lb 60 .61
Stearine oleo (see Oleostearine.)
Stomach substance, not USP fib. dms lb 2.95 3.10
Storax, USP, cs lb. .78 - .80
Stramonium leaves, bgs lb. .18 - .20
Streptomycin hydrochloride, bulk, gm. .17 - —
Sulphate, bulk gm. .17 - —
Strontium bromide, NF, cns., dms. lb .77 - .78
Carbonate, pure, dms., 5-ton lots or more, works lb. .33 - —
1-ton lots, works lb. .37 - —
tech, dms., works lb. .19 - —
Chromate, bbls works lb. .46 - —
Iodide, jars, 25-lb. lots lb. 3.42 - —
Nitrate, bbls., cs., works lb. .11 - .13
Oxalate, bbls, works lb No prices.
Salicylate NF dms lb 1.65 —
Sulphate air floated 90% 325 mesh bgs, works ton.56.70 -65.15
Strontium-calcium sulphide phosphorescent, dms., works lb 2.80 2.85
Strophanthin, NF bots oz.25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Strychnine, NF, powd., cans 100-oz. lots oz. 1.10 - —
Phosphate, NF 100-oz. lots oz. 1.14 - —
Sulphate, USP powd., cans 100-oz. lots oz. .85 - —
Styrene monomer, dms., c.l., works lb. .23½- —
l.c.l., works lb. .23¾- —
tanks, works lb .21 —
Styrolyl acetate, bots lb. 1.45 - 1.70
Sucrose, 100-lb. bgs lb. 8.65 - —
octa-acetate, denaturing grd., 100-200-lb. bgs., l.c.l., works. lb. .71 - —
Sugar coloring (see Caramel coloring)
Sugar of milk (see Milk sugar)
Sulphabenzamide, dms lb 4.00 4.50
Sodium, dms lb 4.10 4.60
Sulphacetamide, fiber, dms lb 4.00 4.20
Sodium, fib, dms lb 5.00 5.20
Sulphadiazin, USP, microcrystals, dms lb 10.60 -11.10
powder, dms. lb .10.25 -10.75
Sulphadiazin-sodium, USP, dms lb.11.25 -11.75
micro crystals, dms lb.10.60 -11.10
Sulphaguanidin, USP, dms lb. 2.50 - —
Sulphamerazin, USP, micro crystals, lb.10.65 -11.15
Sulphamerazin-sodium, USP, dms., lb.11.25 -11.75
Sulphamethazine, micro crystals, dms lb 8.90 9.40
powder, dms lb 8.50 9.00
Sulphanilamide, USP, 30-80 mesh, dms lb 1.40 1.60
microcrystals, dms. lb. 1.70 - 1.90
powder, dms lb 1.30 1.50
Sulphanilamidoquinoxaline, veterinary, dms lb. 6.50 - 6.75
Sulphapyridin, NF, powd., bots., tins, lb 7.00 7.50
Sulphapyridin-sodium, monohydrate, dms lb 7.50 8.00
Sulphathiazole, USP micro crystals, dms lb. 3.15 3.30
powder, dms lb 2.80 2.95
Sulphathiazole-sodium, USP, dms, lb 3.05 - 3.20
Sulphur, commercial, flour, bgs., mines 100 lbs 2.30 - —
bbls., mines 100 lbs. 3.05 - —
lump, bgs., mines 100 lbs. 2.20 - —
bbls., mines 100 lbs. 2.65 - —
crude, bulk, c.l., mines, contract long-ton.26.50 - —
export, f.o.b. vessels, Gulf ports long-ton.31.00 -33.00
domestic and Canada, f.o.b. vessel Gulf port long-ton.28.00 -29.50
refined, flowers, USP, bgs., mines, 100 lbs. 4.00 - —
bbls. 100 lbs. 5.25 - —
flour, light, bgs., mines 100 lbs. 3.60 - —
bbls., mines 100 lbs. 4.50 - —
lump, bgs., mines 100 lbs 3.30 - —
rolls, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.40 - —
salt block, bgs., mines 100 lbs. 3.50 - —
virgin block, bbls., mines, 100 lbs. 3.45 - —

T

3,4,5-T, dms., c.l., works lb 1.40 - —
l.c.l., works lb. 1.45 1.50
isopropyl ester dms, c.l., works lb 1.45 - —
l.c.l., works lb. 1.50 - 1.57
Talc, dom, ordinary, Calif, grd, bgs., c.l., works ton.32.00 -33.50
Vermont off color grd, bgs, c.l. works ton 14.00 - —
l.c.l. works ton 17.50 - —
fibrous, New York, grd., bgs., c.l., works ton 25.00 -30.00
l.c.l. ton.28.00 -35.00
99.5% 325 mesh, bgs, c.l. works ton 27.00 —
l.c.l. works ton 30.00 -32.00
99.95%, micronized, bgs. works, ton 36.00 - —
imp Canadian grd, bgs, c.l., mines ton 15.25 -35.00
Tallow, edible, tanks, dlvd lb. .09½ Nom.
inedible, extra, tanks, dlvd lb. .07½- —
fancy, bleachable, tanks, dlvd. lb. .07¾- —
No. 1, tanks, dlvd lb. .06¾- —
special, tanks, dlvd lb. .06¾- —
sulphonated, 25%, dms., l.c.l. lb. .08 - .08½
50%, dms., l.c.l. lb. .11 - .11½
Tankage, animal, feeding, 9-11% ammo, bulk unit-ton. 6.75 - —
Chicago unit-ton. 7.50 - —
Tapioca flour, Brazilian, ex whse, bgs lb. .13 - .15½
Java, AAA, bgs, ex whse., bgs. lb. .07 - .08
AA, bgs., ex-whse lb. .06½- .07½
Tar acid oil, 15-18% dms., c.l., trt equald gal. .47 .49
l.c.l., same basis gal. .50 .51
tanks same basis gal .39 —
25-28% dms, c.l., same basis, gal. .54 .56
l.c.l same basis gal. .57 .58
tanks same basis gal. .46 —
50-53% dms, c.l., same basis, gal. .70 .72½
l.c.l. same basis gal. .73½ .74½
tanks same basis gal. .62½ —
Coal (see Coaltar).
Pine (see Pinetar)
Tartar emetic tech gran or powd., dms lb. .56 .59
USP, powd., dms lb. .61 - .62
Terpin hydrate com'l bbls, c.l lb .34½ —
l.c.l lb. .25 .25½
NF, cryst., fib dms lb. .57½ .63
powd., fib dms lb. .65 .69
a-Terpineol, dms., l.c.l, dlvd, E lb. .17 - —
Terpineol, commercial, dms., c.l., South lb. .13½- —
l.c.l South lb 14 —
extra dms lb. .41 .60
prime dms lb. .30 .45
Terpinglycol ether dms, c.l., works, lb. .23½ —
l.c.l works lb .25½ —
tanks works lb .22 —
Terpinyl acetate, extra, cns., dms. lb. .57 - .75
prime, dms lb. .55 - .70
Propionate dms lb 1.75 2.00
Terra alba (see Gypsum)
Testosterone, USP, 100-gm. tots, bots gm. .79 - —
Propionate, USP, 100-gm. tots, bots gm. .79 - —
Tetrachloroethane, dms., works lb. .14½- —

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SOLVAY POTASSIUM CARBONATE

SOLVAY POTASSIUM CARBONATE gives you the *highest quality* – at no increase in price! When you order SOLVAY Potassium Carbonate, you're always sure of getting purity that never varies . . . purity that meets the highest standards!

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GRANULAR Hydrated Potassium Carbonate 83-85% K_2CO_3

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Sodium Bicarbonate
Caustic Potash • Chlorine
Sodium Nitrite
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Ammonium Bicarbonate
Cleaning Compounds
Snowflake® Crystals
Calcium Chloride
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Ortho-dichlorobenzene
Monochlorobenzene

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ALLIED CHEMICAL & DYE CORPORATION
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☐ GRANULAR Hydrated Potassium Carbonate 83-95% K_2CO_3
☐ At no cost or obligation—send me SOLVAY's book "Caustic Potash and Potassium Carbonate."
☐ Have your Technical Service contact me.

Name_____
Company_____
Address_____
City_____ Zone____ State_____ BC-3

Tetrachloroethylene—Zinc Sulphate

Tetrachloroethylene, tech (see Perchloroethylene).
USP, 55-gal. fms., works lb 20½ - 21½
smaller, dms., works lb .23½ - .25
Tetraethyl orthosilicate, dms., c.l., works lb .71 - —
l.c.l. lb .72 - —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .69 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb .37½ - —
l.c.l., dlvd. E lb. .38½ - —
tanks, dlvd. E lb. .36 - —
Tetrapotassium phosphate (see Potassium phosphate).
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Thallium metal, dlvd lb 12.50 - 15.00
Sulphate, 99% bots, dlvd lb 10.50 - 13.00
Theobromine, NF, fib. dms lb 3.00 - —
And sodium acetate, USP, fib. dms lb 3.55 - 3.60
Salicylate, fib. dms lb 4.00 - —
Sodio salicylate, NF, fib. dms lb 2.90 - —
Thenoyltrifluoroacetone, anhydrous, or USP, 100-lb. dms lb 3.15 - 4.00
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms kilo. 135.00 - —
Mononitrate, USP, fib. dms kilo 135.00 - —
Thiocarnanilide, dms lb .50 - .52
Thiodiphenylamine (see Phenothiazine).
Thiophene, dms., c.l., works lb. No stocks
Thiourea, tech., cms., c.l., works lb. .40 - —
l.c.l., works lb. .42 - —
Thorium nitrate, purified, fib. dms., 100-lb. lots or more, works lb 3.50 - —
Threonine dextro laevo, bots, 1-kilo lots kilo. 600.00 - —
Thyme, French, bgs lb 21 - .25
Spanish, bls lb 10 - 10½
Thymol, fib. dms lb 3.00 - 3.25
Timbo root (see Cube root).
Tin chloride, stannous, anhyd., dms., works lb. .824 - 1.031
Crystals, hydrous, dms., works lb. .81½ - .84½
Metal (Straits) lb. .85 - .85½
Oxide, dms. lb. .87 - .88
Sulphate, stannous, bbls lb. .853 - .903
Tetrachloride, anhyd., dms., works lb. .72 - .73
Titanium dioxide, anatase, chalk resistant, bgs., c.l., dlvd lb. .22½ - —
l.c.l., dlvd lb. .23½ - —
ceramic, bgs., c.l., dlvd lb. .22½ - —
l.c.l., dlvd. lb. .23½ - —
regular, bgs., c.l., dlvd lb. .22½ - —
l.c.l., dlvd. lb. .23½ - —
metallurgical, natural, granular, bgs., c.l., f.o.b. Jacksonville, Fla. ton. 120.00 - —
Niagara Falls, N. Y. ton. 137.50 - —
5-ton lots, same basis ton. 142.50 - —
ton lots, same basis ton. 147.50 - —
Milled titanium dioxide $7.50 per ton higher.
rutile, non-chalking, bgs., c.l., dlvd. E lb. .24½ - —
l.c.l., dlvd. E lb. .25½ - —
Hydride, cns., works lb. 7.95 - 9.00
Pigment, calcium-rutile base, bgs., c.l., dlvd lb. .08¾ - —
l.c.l., dlvd lb. .08¾ - —
Titanium tetrachloride, tech., dms., c.l., works lb. .45½ - —
l.c.l. works lb. .48½ - .56½
tankcars, works lb. .44½ - —
a-Tocopherol, bots kilo. 225.00 - —
Acetate, bots kilo. 225.00 - —
Toluidin base, distilled, bgs lb 1.30 - —
Tolu balsam, cns., dms lb. 3.00 - 3.75
Toluene (see Toluol).
Toluol, coaltar, industrial or nitration, tanks, works:
Bethlehem, Pa gal. .34 - —
Birmingham dist gal. .32 - —
Chicago dist gal. .35 - —
Cleveland, dist gal. .34½ - .35
Geneva, Utah gal 26 - —
Johnstown, Pa. gal. .32 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex gal. .35 - —
Lorain, Ohio gal. .33 - —
Minnequa, Colo gal. .32 - —
Philadelphia, Pa gal. .35 - —
Pittsburgh dist gal. .32 - —
Sparrow's Point, Md gal. .34 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal. .32½ - .33
petroleum, industrial, 2°, tanks, works, Albany, N. Y. gal. .35 - —
Bayonne, N. J. gal. .35 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Detroit, Mich gal. .35 - —
Philadelphia, Pa gal. .35 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —
Tonka beans, Angostura, cks lb. 1.65 - 1.80
Brazilian, Surinam, cs lb. 1.00 - 1.25
Totaquine, 100-oz. lots, cns oz. .42 - —
Toxaphene, dms., c.l., works lb. .17 - —
truckloads, works lb. .17 - —
ton to truckloads, works lb. .20 - —
smaller lots, works lb. .23 - —
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Tributyl citrate, tech., dms., c.l lb. .40½ - —
l.c.l. lb. .41½ - —
tanks lb. .39 - —
Phosphate, dms., c.l., works lb. .52 - —
l.c.l., same basis lb. .53 - —
tanks lb. .50 - —
Tributylamine, dms., c.l., works lb. .74 - —
l.c.l., same basis lb. .75 - —
tanks, same basis lb. .72 - —
Trichlorobenzene, dms., c.l., works, frt. alld lb. .14½ - —
l.c.l., frt. a'ld lb. .15½ - —
tanks, frt. alld lb. .13 - —

Prices in the West 1¾c. higher.

Trichloroethylene, dms., c.l., or truckloads, works, frt. equald. lb. .11¼ - —
dlvd. E lb. .12½ - —
l.c.l., dlvd. E lb. .13½ - —
tanks, works, frt. equald lb. .10¼ - —
dlvd. E lb. .11 - —
Trichloroethane, dms., c.l., works lb. .13 - —
l.c.l., works lb. .13½ - —
tanks, works lb. .11½ - —
Tricholine citrate, 65% solut., ret. chys., works, frt. adjusted lb. 1.40 - 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd. lb. .36 - —
tanks, dlvd. lb. .33 - —
petroleum, dms., c.l., dlvd lb. .35 - —
l.c.l., dlvd. lb. .36 - —
tanks, dlvd. lb. .33 - —
Triethanolamine, dms., c.l., dlvd. E lb .26¼ - —
l.c.l., same basis lb. .27¼ - —
tanks, same basis lb. .24½ - —
Triethylamine, dms., c.l., works, dlvd. E lb. .47 - —
l.c.l., same basis lb. .48 - —
tanks, same basis lb. .45 - —

Triethyl phosphate, dms., c.l., works lb. .38 - —
l.c.l., same basis lb. .39 - —
tanks, same basis lb. .37 - —
Triethyleneglycol, dms., c.l., dlvd. E, lb. .23¼ - —
l.c.l., same basis lb. .24¼ - —
tanks, same basis lb. .21½ - —
Triethylenetetramine, dms., c.l., dlvd. E lb. .43½ - —
l.c.l., dlvd. E lb. .49½ - —
tanks, dlvd. E lb. .47 - —
Trimethylamine, 25-40%, dms., c.l., works, frt. equald, basis 100% lb. .38 - —
l.c.l., works, frt. equald, basis 100% lb. .38½ - —
tanks, works, frt. equald., basis 100% lb .33 - —
Tripentaerythritol, bgs., l.c.l., works lb. .37 - —
Triphenyl phosphate, bbls., c.l., frt. equald lb. .39 - —
l.c.l., frt. equald lb. .40 - —
Triphenylguanidine, bbls., works lb. .90 - —
Tripoli, air floated, bgs., c.l., works, ton. 55.00 - —
double grd., same basis ton. 52.00 - —
single grd., same basis ton. 50.00 - —
Tripropyleneglycol, dms., c.l., frt. alld lb. .26¼ - —
l.c.l., frt. alld lb. .27¼ - —
tanks, frt. alld lb. .24½ - —
Trisodium fluoroacetate (see Sodium fluoroacetate, tribasic).
Phosphate (see Sodium phosphate tribasic).
Trypsin, pharmaceutical, 1:30, dms., works lb. 5.00 - 5.50
Tryptophane dextro-laevo, fib. cns. works kilo. 165.00 - —
Tuba root (see Cube root).
Tungsten metal, powd., 99.9%, dms. works lb. 6.21 - —
Turpentine, gum and wood (see Protective Coatings market, Naval Stores).
Tyrothicin, USP, bots gm. .75 - .85

U

Urethane, USP, dms lb. 1.50 - —
Unicorn root, false (see Helonias root).
True (see Aletris root).
Urea, dom., 46% N, bgs., c.l., works lb. .06 - —
l.c.l., works lb. .06½ - —
45% N, bgs., c.l., 30 tons, frt. alld. Kan., Neb., N. Dak., Okla., S. Dak., Tex. and W. Va. ton. 154.00 - —
l.c.l., dlvd. ton. 162.00 - —
Urea-ammonia liquor, A and B grades, N basis, tankcars, Belle, W. Va. ton. 128.00 - —
C grade, tankcars, same basis. ton. 126.50 - —
37 grade, tankcars, same basis ton. 155.50 - —
Uva ursi leaves, bls lb. .12 - .14

V

Valerian root, Belgian, bgs lb. .38 - .40
Valine, dextro-laevo, dms., works lb. 21.00 - 27.50
Valonia beards, 40-42% tannin, ngs., ex dock ton. 74.00 - —
cups, 28-30% tannin, ngs., ex dock ton. 54.00 - 55.00
extract, powd., 62% tannin, bgs., ex dock, duty extra lb. .05½ - —
Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33
Vanilla beans, Bourbon, tins lb. 7.25 - 7.75
Mexican, cuts, tins lb. 7.25 Nom.
whole, tins lb. 7.50 - 7.75
Tahiti, cs lb. 6.90 - —
Vanillin, ex eugenol, tins, 25-lb. lots, lb 6.50 - 6.75
smaller lots lb 6.90 - 7.25
ex guaiacol, tins, 25-lb lots lb 3.00 - —
smaller lots lb 3.05 - 3.15
ex lignin, tins, 25-lb lots lb 3.00 - —
smaller lots, cns lb 3.05 - 3.15
Vinyl acetate, 55-gal. dms., c.l., dlvd. E lb. .17½ - —
l.c.l., dlvd. E lb. .18½ - —
tanks, dlvd. E lb. .15½ - —
Butylether, normal, tech., dms., c.l., works lb .28 - —
l.c.l., works lb .30 - —
tanks, works lb .27 - —
Ether (see Ether, Vinyl).
Ethylether, tech., dms., c.l., works, lb. .26 - —
l.c.l., works lb. .28 - —
tanks, works lb. .25 - —
Isobutylether, tech., dms., c.l., works lb. .28 - —
l.c.l., works lb .30 - —
tanks, works lb .27 - —
Methylether, cyls., works lb. .23 - —
tanks, works lb .20 - —

Cylinders are sold outright, or if shipped against deposit, a free period of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made.

Pyridin, ret. dms., works lb. 1.50 - —
Trichloride (see Trichloroethane).
Viosterol, in alcohol, 1,000,000 D units per gm, bots, lots of 10 billion USP units, 1,000,000 units. .025 - —
lots of 1 billion USP units, 1,000,000 units. .03 - —
lots of less than 1 billion USP units, 1,000,000 units. .035 - —
in nat., veg. oil, 400,000 to 1,000,000 D units per gm., bots., lots of 10 billion USP units, 1,000,000 units. .02 - —
lots of 1 billion USP units, 1,000,000 units. .025 - —
lots of less than 1 billion USP units, 1,000,000 units. .03 - —
Vitamin A synthetic, acetate crystalline, beads, 500,000 A units per gm gm. .07¼ - —
liquid, in oil, 1,000,000 A units per gm, 1,000,000 units. .12 - —
Palmitate, liquid, 1,000,000-1,800,000 A units per gm, 1,000,000 units. .12 - —
in oil, 1,000,000 A units per gm, 1,000,000 units. .12 - —
B (see Thiamine hydrochloride).
B_2 (see Riboflavin).
B complex, natural (see Rice bran concentrate and Yeast).
B_6 (see Pyridoxine hydrochloride).
B_{12}, crystalline, gm. or 5 gm. vials gram. 295.00 - —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gm. 225.00 - —
C (see Acid, ascorbic).
D (see Oils, codliver and fish liver, Calciferol, and Viosterol).
D_2 (see Calciferol).
E (see Alphatocopherol and Oil, wheatgerm).
Vitamin G (see Riboflavin).
H (see Biotin).
K Active (see Menadione).
K_1 25 gm. bots gram. 4.50 - —
Violet methyl toner (see Blue methylviolet toner).
V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root bark, bls lb. 2.30 Nom.
Warfarin, 0.5%, dms., 50 lb lots, dlvd lb 1.95 - —
25-49 lb. lots, f.o.b., N. Y., or Chi lb 2.05 - —
5-24 lb lots, cns, f.o.b., N. Y., or Chi lb 2.15 - —
Wattle bark, fair average, c.i.f. African, bgs., ex dock ton 100.00 - —
merchantable bgs., ex dock ton 96.50 - —
extract, liquid 35% tannin, bbls. lb. .09¾ - .10
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra lb. .10 - —
S. Africa, 60% tannin, ex-dock, duty extra lb. .10 - —
Wax, amorphous (see Wax, microcrystalline).
Bayberry, bgs., spot lb. 42 - 45
Bees, crude, African, bgs lb. .52 - .53
Brazilian, bgs lb. No stocks.
Central American, bgs lb. .54 - .55
Chilean, bgs lb. .55 - .56
refined, bleached, white, bricks lb. .65 - .67
slabs lb. .67 - .69
yellow, bricks lb. .58 - .60
slabs lb. .57 - .58
Candelilla, crude, bgs lb. .73 - .75
refined, bgs lb. .75 - .77

Powdered candelilla, 20 mesh, 5c. per lb. higher; 80 mesh, 5½c.; 100-200 mesh, 6c.

Carnauba, chalky, bgs., ton lots, lb. .84 - .85
North Country, No. 2, bgs., ton lots lb. .93 - .94
No. 3, Ceara, crude, bgs., ton lots lb. .84 - .86
refined, bgs., ton lots lb. .85 - .87
Parnahyba, crude, bgs., ton lots lb. .87 - .89
yellow, No. 1 Ceara, bgs., ton lots lb. 1.18 - 1.20
No. 2, Ceara, bgs., ton lots, lb. 1.17 - 1.19

Powdered carnauba wax price differentials same as powdered candelilla.

Japan, bgs lb. .24 - .26
Microcrystalline, 170°-175°F., m.p., ASTM, penetration 15-20, amber, ctns., 20,000 lbs., group 3, works lb. .13 - .14
smaller lots, same basis lb. .14 - .15
black, ctns., 20,000 lbs., same basis lb. .11½ - .12½
smaller lots, same basis lb. .12½ - .13½
white, ctns., 20,000 lbs., same basis lb. .24 - .25
smaller lots, same basis lb .25 - .26
180°-185°F., m.p., ASTM, penetration, 7-11, amber, ctns., 20,000 lbs., same basis lb. .16 - —
smaller lots, same basis lb. .17 - —
black, ctns., 20,000 lbs., same basis lb. .14½ - —
smaller lots, same basis lb. .15½ - —
white, ctns., 20,000 lbs. same basis lb. .27 - —
smaller lots, same basis lb. .28 - —
190°-195°F., m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis lb. .20 - —
smaller lots, same basis lb. .20½ - —
black, ctns., 20,000 lbs., same basis lb. .18 - —
smaller lots, same basis lb. .18½ - —
white, ctns., 20,000 lbs., same basis lb. .33½ - —
smaller lots, same basis lb. .34½ - —
Montan, dom., refined, bgs lb .31 - .32
imported, crude, Bohemian, bgs lb. .12 - .13
German, bgs lb. .13 - .13½
Ouricury, ref., bgs lb. .80 - .82
Paraffin (see P).
Spermaceti, blocks, cs lb. .25½ - .31
cakes, cs lb. .26½ - .32
Sugar cane, dom., ref'd., slabs, works lb. .75 - .80
spot lb. .77¼ - .82¼
White lead (see Lead, white).
White pine bark, rossed, bls lb. .20 - .22
White precipitate, USP powd., dms., lb 9.00 - —
Whiting (see calcium carbonate).
Wild cherry bark, thin, natural, bls lb. .18 - .19
rossed, bls lb. .19 - .24
Ginger (see Snake root, Canada).
Witch hazel bark, bls lb. .16 - —
leaves, bls lb. .23 - .24
Woodflour, 40 mesh, bulk, c.l., works East ton. 32.00 - —
c.l., same basis ton 36.80 - —
60 mesh, bulk, c.l., same basis ton 37.00 - —
c.l., same basis ton 42.00 - 55.00
80-100 mesh, bulk, c.l., same basis ton 45.00 - 50.00
c.l., same basis ton 51.75 - 57.50

Woodflour in bgs, extra, returnable.

Woolfat, crude (see Degras).
USP (see Lanolin).
Wormseed, American, bgs lb. .20 - .25
Levant, ogs lb 4.25 - 4.50

X

Xylene (see Xylol).
Xylenol, cryst., 56°-58°C., m.p., ret. dms., l.c.l., works, frt. equald. lb. .30 - —
45°-47°C., dms., c.l., same basis. lb. .212 - —
l.c.l., same basis lb. .215 - —
tanks, same basis lb. .199 - —
fractions, over 7°C. b.r., except meta, dms., c.l., same basis gal. .96 - —
l.c.l., same basis gal. .99 - —
tanks, same basis gal. .85 - —
meta fraction, over 7°C. b.r., dms., c.l., same basis gal. 1.01 - —
l.c.l., same basis gal. 1.04 - —
tanks, same basis gal. .90 - —
Xylidins, mixed, dms lb. .39 - .50
Xylol, coaltar, industrial, tanks, works
Bethlehem, Pa. gal. .35 - —
Birmingham district gal. .32 - —
Chicago district gal. .35 - —
Cleveland district gal. .35 - —
Geneva, Utah gal. .27 - —
Johnstown, Pa. gal. .33 - —
Lackawanna, N. Y. gal. .35 - —
Lone Star, Tex gal. .35 - —
Lorain, Ohio gal. .33 - —
Xylol, coaltar, indust., tanks, works, Minnequa, Colo gal. .34 - —
Philadelphia, Pa gal. .36 - —
Pittsburgh district gal. .32 - —
Sparrows Point, Md gal. .35 - —
Terre Haute, Ind gal. .35 - —
Youngstown, O gal. .32½ - —
petroleum, indust., tanks, Albany, N.Y. gal. .35 - —
Bayonne, N. J. gal. .35 - —
Baytown, Tex. gal. .33 - —
Chicago, Ill. gal. .35 - —
Philadelphia, Pa. gal. .35 - —
Providence, R. I. gal. .35 - —
Wood River, Ill. gal. .35 - —

Y

Yara yara, cns lb. 2.15 - 2.65
Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms lb. .47 - —
90 int'l B units per gram, 100-lb dms lb. .52 - —
200 int'l B units per gram, 100-lb dms lb. .56 - —
300 int'l B units per gram, 100-lb dms lb .60 - —
Yellow, barium chromate, CP, bgs., l.c.l., dlvd N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul lb .35 - —

Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below.

Benzidin, AAA, bbls., dlvd lb. 1.91 - —
AAOT, bbls lb 2.15 - —
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies lb. 2.05 - —
lithopone, all shades, bbls., frt. alld., E. of Rockies lb. 1.20 - —

Cadmium yellows, Los Angeles and San Francisco ex whse 1c per lb higher.

Chrome, CP, bbls., dlvd. N. Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island lb. .31 - —

Dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c higher); Miss., N. C., S. C., Penna., Dallas, Tex., 1¼c higher; Ft. Worth, Tex., 1½c. higher; El Paso, Tex., 2c higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

Hansa, 10 G, bbls, same basis, chrome lb. 2.15 - —
G pigment, bbls lb. 1.91 - —
Iron oxide, natural, French type, bgs., c.l., works lb. .05¼ - —
Peruvian type, bgs., l.c.l. lb. .038 - —
pure, bgs., c.l., works lb. .10½ - —
l.c.l., works lb. .10¾ - —
Mercury oxide, bbls., 1,000-lb. lots. lb. 4.15 - —
smaller lots lb. 4.17 - —
Ocher (see Yellow iron oxide, natural).
Zinc (chromate) bbls., dlvd lb .25 - —
basic, dlvd lb .30 - —
Yerba santa leaves, bls lb. .40 - —
Yohimbine hydrochloride, bots, tins oz. 4.75 - 5.25

Z

Zein, bgs., 30,000-lb. lots, works lb. .38 - —
1,000 to 30,000-lb lots, works lb. .40 - —
smaller lots, works lb .43 - —
Zinc acetate, tech., bbls., dms., works lb. .27 - —
NF VIII, dms lb. .53 - —
Borate, bgs., c.l., dlvd. E lb. .192 - —
l.c.l., dlvd. E lb. .202 - —
Carbonate, tech., rubbermakers, bgs., c.l., works lb. .14½ - —
l.c.l., works lb. .15 - —
Chloride, NF, gran., dms lb. .42 - —
precipitated, powd., dms lb .26 - —
solution 50%, dms., c.l., works, 100 lbs. 5.50 - —
l.c.l., works 100 lbs. 6.10 - —
tanks, works 100 lbs. 4.85 - —
tech., fused, dms., c.l., works 100 lbs. 10.85 - —
l.c.l., works 100 lbs. 11.35 - —
gran., fib., dms., c.l., works 100 lbs. 10.60 - —
l.c.l., works 100 lbs. 11.00 - —
Chromate (see Yellow zinc).
Cyanide, kgs., 1,000-lb. lots or more, works lb. .523 - —
smaller lots, works lb. .543 - —
Dust, pigment, bbls., c.l., works, lb. .12¾ - —
l.c.l., works lb. .13¾ - —
Fluoride, bbls., works lb. .49 - .50
Hydrosulphite, dms., c.l., frt. alld. lb. .21½ - —
l.c.l., frt. alld lb. .22 - .37¼
Iodide, NF, jars lb. 5.25 - —
Laurate, bbls lb. .45 - .46
Metal, slabs, E. St. Louis lb. .09½ - —
Naphthenate, liquid, 8%, Zn., dms., frt. alld lb. .24½ - —
10% Zn, dms, frt. alld lb. .30 - —
Oleate, fused, bbls lb. .36 - —
Oxide, pigment, American process, lead-free, bgs., c.l., dlvd lb. .13½ - —
l.c.l., dlvd lb. .14½ - —
leaded 35%, bgs., c.l., dlvd, lb. .14 - —
l.c.l., dlvd lb. .15 - —
50%, bgs., c.l., dlvd lb. .14½ - —
l.c.l., dlvd lb. .15½ - —
French process, com'l green seal, bgs., c.l., dlvd lb. .15¼ - —
l.c.l., dlvd lb. .16¼ - —
red seal, bgs., c.l., dlvd lb .14¾ - —
l.c.l., dlvd lb. .15¾ - —
white seal, bgs., c.l., dlvd lb. .15¾ - —
l.c.l., dlvd lb. .16¾ - —
USP, ctns., c.l., dlvd lb. .16¾ - —
l.c.l., dlvd lb. .17¾ - —

Zinc oxide Pac. coast prices 1c. higher.

Phenolsulphonate, NF, gran., dms. lb. .39 - —
powd., dms lb. .42 - .49
Resinate precip., dms., frt. alld. lb. .26¾ - —
Silicofluoride, bbls, works lb. .12 - .13
Stearate, tech., USP, ctns., c.l. lb. .37 - —
l.c.l. lb. .38 - .42
Sulphate cryst., 22% Zn, bgs., c.l., works, frt. alld. 100 lbs. 7.40 - —
l.c.l., same basis 100 lbs 7.90 - 9.90
flake, 25½%, Zn., bgs., c.l., works 100 lbs. 6.55 - —
l.c.l., works 100 lbs 6.90 - —
36% Zn, bgs., c.l., frt. alld. 100 lbs. 7.90 - 8.05
l.c.l., same basis 100 lbs. 8.65 - 8.80

Zinc sulphate in bbls. 40c higher.

USP, gran., dms lb. .26 - —

Zinc sulphide, pure, bgs., c.l., dlvd	lb.	.2330-	—
fluorescent fib., dms. less than 1,000-lb. lots, works	lb.	1.10	1.90
phosphorescent fib. dms less than 1,000-lb. lots, works.	lb	1.85	2.50
Undecylenate dms	lb	2.25	2.50
Yellow (see Yellow, zinc).			
Zinc ammonium chloride ngs. c.l. works	100 lbs.	9.65	—
bbls., c.l., works	100 lbs.	10.25	—
l.c.l., bbls., works	100 lbs.	10.75	—
Zinc-cadmium sulphide fluorescent fib., dms. less than 1,000-lb. lots, works	lb.	2.10	2.90
Zinc-calcium resinate dms. c.l., works	lb	1180-	1360
l.c.l., same basis	lb.	.1220-	.1400
Zinc-formaldehyde sulphoxylate basic dms c.l	lb	25½	—
l.c.l	lb	26	41½
normal dms. l.c.l. works	lb	52	—
Zircon (G), granular, bgs., c.l., works	lb.	.03¼-	—
5 tons to c.l., works	lb.	.03⅜-	—
1 ton to 9,999-lb. lots, works.	lb.	.04	—
smaller lots, works	lb.	.03½-	—
Zircon, milled, bgs, c.l., works	lb.	.04¼-	—
5 tons to c.l., works	lb.	.04⅜-	—
1 ton to 9,999-lb. lots, works.	lb.	.04⅝-	—
500 to 1,999-lb lots, works.	lb.	.07½-	—
Zircon (G) in barrels, lc. higher.			
Zirconium acetate, 13% sol ZrO., c.l., 30,000 lbs. minimum, works	lb.	.23	—
Carbonate basic, cak. obls., works	lb	No prices	
Hydride cns. works	lb	7.25	11.50
Nitrate dms ex whse	lb	4.50	7.00
Oxide, 92½%-99%, white, grd., bbls., or bgs., works	lb.	1.50	—
lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb.	.44½-	—
1 ton to 9,999-lb. lots, lbs., works	lb.	.45	—
C.P., white, grd., bbls., or bgs., works	lb.	1.50	—
lump, electric fused, bags, 500 to 1,999-lb. lots, works	lb.	45½-	—
smaller lots, works	lb.	.48	—
milled, electric-fused, bgs., c.l., works	lb.	.59	—
5-ton lots, works	lb.	.59½-	—
1 ton to 9,999-lb. lots, works	lb.	.60	—
500 to 1,999-lb lots, works	lb.	.60½-	—
smaller lots, works,	lb.	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb	.35½-	—

Esso President Sees

—Continued from page 5

new industries are competing vigorously with each other and with the older industries, Mr. Hope added.

Business Level Seen High

"With our productive capacity what it is, obviously not every producer of goods will be able to sell all he can make; not every distributor will be able to sell everything he can buy. But there seems no reason why the efficient producer and the market-wise distributor should not look forward to a high level of business and good earnings," the speaker said.

The important change that has taken place and that will be further emphasized this year, Mr. Hope went on, is the shift in emphasis from providing enlarged and more efficient productive capacity to the problem of finding more efficient and better ways of selling. He suggested careful analysis of sales methods and sales organization, more intensive salesmen's training programs, studies of salesmen's use of time and the structure of their territories, more emphasis on market research, and another look at product design, packaging, and the public reaction to advertising.

Walton Advises Planning

Planning and teamwork are the keys to the growth from which tomorrow's business volume will come, Dr. C. W. Walton, general manager of the adhesives and coatings division of Minnesota Mining & Manufacturing Company, told the conference. The first essential of new product development, Dr. Walton declared, is a favorable, open-minded environment in which new ideas can germinate, develop and mature. Only top management, he pointed out, can create an atmosphere of enthusiasm and creativity throughout the organization, by saying, "Let's take another look" rather than "No" when a new idea is presented.

Top management, Dr. Walton said, also must provide the needed coordination of many people in many departments—basic research, product development, process development, engineering, production, market research, market development, application research, cost accounting, technical sales service, and sales. New-product coordination in small companies should be the function of the president or executive vice-president, he suggested; in large companies it may be delegated to a line vice-president or to a staff officer reporting directly to top management. "My experience," Dr. Walton said, "indicates that it is a mistake to insulate this job function of new business development from top management in any degree whatsoever."

The sales manager who wants to make sure his salesmen will listen to him should take a page from their book and sell rather than just tell, C. W. Blount, vice-president, Bakelite Company, a division of Carbide & Carbon Corporation, New York, advised the conference. "Some salesmen are the targets of more literature, systems, and 'pep-er-uppers,' than anyone in the world, including their customers," Mr. Blount declared. He suggested limiting the volume of communications to salesmen and making sure "that we are telling them something that makes sense, not only to us but to them."

Well planned motivation is "the oxygen and the plasma" by which a company must live, grow, and succeed, Paul R. Larimer, general sales manager, Ansul Chemical Company, Marinette, Wis., declared. Mr. Larimer advised a "flexible concept and philosophy of developing your men to feel they are an integral part of your company." Properly motivated employees, he said, "instinctively" perform in a manner creditable to themselves and to the company; they do not feel that "well-enough is good-enough."

Mass Motivation Impossible

Although motivation technics should be developed so as to apply to all, they must, Mr. Larimer asserted, be individually offered for self-application. "I do not believe that you can get mass motivation. By 'shot-in-the-arm' tactics you can get temporary enthusiasm which may prompt you to say to yourself, 'Boy, did we fire up that gang today.' But I do not hold that such tactics are of long-range value. A man should be able to support his enthusiasm and confidence in himself and by himself," Mr. Larimer declared.

Accurate predicting of product demand must be substituted for the "dream" and "quota" types of sales forecast if forecasting is to serve its real purpose, S. B. Jurenev, assistant to the board chairman, Continental Oil Company, New York, stated. "Dream" forecasts, which are never capable of achievement, he said, and the more reasonable sales quota type of forecast may serve as useful sales promotion tools to keep sales effort and competitive spirit at a high pitch in the organization. But the real purpose of the forecast, Mr. Jurenev pointed out, goes far beyond that. Accurate sales estimates are essential in determining production schedules, expected profit position, and allocation of profits between reinvestment and dividends.

Selecting Salesmen Important Task

W. F. Allen, vice-president and director of sales for Upjohn Company, Kalamazoo, Mich., declared that careless plans for the recruiting and selection of salesmen can be the most extravagant waste in the total cost of sales. "Nowhere will an invested dollar yield greater returns than in the carefully chosen and successful salesman," he said. Selecting salesmen, he added, is the most important responsibility of marketing executives. "All other responsibilities are in my opinion subordinate to this one," he went on, adding that employment of sales representatives should be as carefully planned as any other major capital investment.

Edward S. McKay, consultant in special marketing studies at General Electric Company, said the three key ingredients of professional marketing are a factual marketing plan, a functional organizational structure and a professionally managed operation.

BDSA Post to Pothen

W. Elmer Pothen has been named assistant administrator of the Business and Defense Services Administration. Mr. Pothen, who has been serving without compensation as director of the communications equipment division, succeeds Perrin G. March, 3rd, who has returned to his old position as president of the Cincinnati Shaper Company.

ANSWERS TO YOUR QUESTIONS ABOUT ROCHE VITAMIN A

Q. *What is Roche vitamin A?*

A. It is vitamin A, the product of a synthesis which starts with Citral, from lemon grass oil. It is identical biologically with the vitamin A from other sources, such as fish livers. A Roche research team directed by Dr. Otto Isler announced their famous synthesis in 1947. This successful, economical process is now used to produce vitamin A of superb quality by the tons at Roche Park.

Q. *Does Roche vitamin A have a "fishy" odor or taste?*

A. None whatever, nor is there any "fishy burp." In fact, Roche vitamin A has almost no odor or taste and so is preferred for pharmaceutical preparations.

Q. *Will I be able to get a steady supply of Roche vitamin A?*

A. You will. The entire commercial needs of the food and pharmaceutical industries of the United States and Canada could be met from our Nutley plant.

Q. *Can I be sure of a "standard" product?*

A. You can. Roche vitamin A is manufactured under strict laboratory control. It is more stable. It is uniform. The regular commercial types of Roche material, if diluted to 50,000 to 65,000 units per gram, will meet the specifications of U.S.P. XIV for oleovitamin A. It is a product of excellent quality.

Q. *What about price?*

A. Roche vitamin A is not subject to wide fluctuation of price, as has been true with vitamin A from natural sources. This can mean large savings for you as there is no need to carry large inventories as was the case prior to the introduction of Roche vitamin A in 1950. Never before has the purchaser been assured of such low prices, consistent with quality and uniformity.

Q. *How is Roche vitamin A packed?*

A. All Roche vitamin A is packed under conditions which assure its stability in customary shipment and storage.

Q. *Can I get help from Roche in using vitamin A in my products?*

A. Certainly. The technical experts at Roche are ready at all times to help you. If you need samples, please send your requests to the Vitamin Division. For years many industries—canning, baking, milling, pharmaceutical manufacturing—have looked to Roche as their headquarters for information about, and supplies of, vitamins. It is important to you that Roche specializes in the manufacture of vitamins.

Q. *Is Roche vitamin A available in different types and potencies?*

A. It is. The following table shows the types most popular in pharmaceutical manufacturing.

TYPE	DESCRIPTION	POTENCY	ADDITIVE*
P1MO	Vitamin A palmitate	1,000,000 U.S.P. XIV units per gram	Edible oil only for standardization
P1.3	Vitamin A palmitate	Ranging between 1,250,000 and 1,500,000 U.S.P. XIV units per gram	None
A1MO	Vitamin A acetate	1,000,000 U.S.P. XIV units per gram	Edible oil only for standardization

*Antioxidants or other additives are included on customer's specifications.

Notes: Type P1MO has less tendency to crystallize during storage and handling than higher concentrations of vitamin A palmitate and acetate.

Type P1.3 is more susceptible to crystallization than type P1MO but can be handled without difficulty when using certain precautions.

Two other types of vitamin A palmitate and acetate are also available. They may be used for research and special production in which special handling can be provided. They are: Type P1.8 vitamin A palmitate—1,650,000 to 1,800,000 U.S.P. XIV units per gram and Type A2.9 vitamin A acetate—2,900,000 U.S.P. XIV units per gram.

ROCHE

Vitamin A acetate and palmitate

Call Roche for vitamins

Vitamin Division

HOFFMANN-LA ROCHE INC.

Nutley 10, New Jersey • NUtley 2-5000

Pacific Coast: L. H. BUTCHER CO., San Francisco • Los Angeles Seattle • Portland • Salt Lake City

In Canada: Hoffmann-La Roche Ltd. 286 St. Paul Street, West; Montreal, Quebec

Oil, Paint & Drug Reporter

Founded October 18, 1871, by William O. Allison
Directed 1900-1942, by Harry J. Schnell

Incorporating Drug, Paint and Oil Trade, The New York Drug Bulletin, The Weekly Drug News, New York Druggists' Price Current, The Soap Makers Journal, Oil and Paint Review, and International Petroleum Reporter.

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Considering the Consumer

Much advice is being handed out these days to those who in one way or another are endeavoring to get the public to buy more something or another with the purpose of getting them to recognize, at least to some extent, the role of the consumer in the processes of distribution. Some of the experts in public relations, wholly apart from publicity, are rather severe in their criticism of what they call the advertisers' apparent belief that the consumer cannot, or at least does not, think. That criticism is coming particularly from those who are engaged in the production of advertising. They are finding a number of reasons to doubt the soundness of the popular theory that buying is mostly done by eye and ear, with no participation by the brain. Some of them are emphasizing what they call the key role of the consumer. But, they are concerned about wholly with what the consumer could do to expand the national volume of trade if he would but do this or that. They have not yet got very far in the direction of getting the consumer to do so.

The consumer has always had a key role in the processes and progress of distribution. His has always been the most necessary, hence the most important, part in those activities. The trouble, for him, has been that he did not know how to fill that part. He is learning—in spite of the trend to get government to do everything for him.

Evidence of that learning has been presented in connection with the recent strike of milk deliverers and the still later alleged finagling in the price of coffee. While the little helpers in government were urging:—"Forget a minute about the Big Four, atoms, deficits, and the budget. But for goodness sake do something about the 15-cent cup of coffee," the consumers cut down on the buying of coffee so that sales in the New York area dropped almost 50 percent. So, there are obvious reasons why leaders in the advertising field are advising that the producers of advertising make an honest effort to know if a given message "will make sense to thoughtful people," and help to overcome "much of the hypobole, bombast, hysterics, inaccuracy, and inanition that makes for the disenchantment and disbelief of the American public."

The Federal Trade Commission is on another track with a purpose of getting local officials to clamp down on advertisers who make untruthful claims or offers as a lure for customers. The commission is planning to carry on a campaign designed to induce consumers to insist on such action, the intrastate offenses not coming within its jurisdiction.

There is talk about the creation of a consumers' division in the United States Department of Commerce. The legislatures of several states have currently before them bills to create state departments to look after the interests of consumers in the buying of goods.

Of course, there have been all sorts of organized consumer protections for many years. Some of them have done a measure of good for business as a whole. Some have been merely professional reformers motivated chiefly, if not wholly, by self interests. But, the consumer is learning a few things and may some day arrive at something like the self-promoting capacity of farm groups. At the present time, anybody who would actively promote and participate in a campaign in that direction would be condemned as a socialist—he would be that in the best sense of the term, but it would not be applied in that sense. It is not, however, too much to expect that the consumers' activity in his important economic role will increase. Farsighted business leaders are already recognizing that possibility and they also see what it could do, and how, for the general good of business. Some of them are looking toward a program of promotion in the direct consumer areas of public relations. Others, as always, are on the other side of the fence in such things as further straining of consumer credit, even to the extent of converting consumers into capitalists by way of selling corporate stocks on the instalment plan. The intelligent businessman knows that the consumer is his best partner—as a consumer. And he treats him as such, with the consideration that is his due.

The Randall Purport

Whatever one may think on the controversial subject of governmental foreign policy or about the much-discussed idea of government by commission, the fact that the so-called "Randall Comission" has filed its report to the President on the economic aspects of the foreign policy puts the question before the nation for practical consideration. It brings into national focus the new position of the United States in global economics. Hence it calls for adequate consideration of what this country should do in its involuntarily acquired leadership. There are those who urge that that leadership be asserted. They know little of world affairs. The American habit of asserting its this or that has not been good for the American people in the eyes of the world. The better informed observers of foreign relations know that the leadership which has fallen upon this country should be fitted to its task and applied accordingly.

Once upon a time, the United States was a country of maritime prominence and horse-trading ability. It has fallen back in both of those areas. The reasons for that change are innumerable insofar as comments and opinions go. The Randall report in several aspects demands that those reasons be converted to logical constructions and that the effects of the change in both directions be analyzed comparatively in terms of full national welfare.

The Randall report was made ahead of schedule in order that its consideration need not be hurried. That consideration from the viewpoint of business should be stated at once. It should be as broad as possible and equally deep, with a constructive purpose. In a business sense, as well as in any other, the United States cannot stand aloof among the countries of the world. In the final analysis, it needs the others as much as they need it. It is in position to lead but not to drive. And it is only as a leader, not as a driver, that it can expect to be followed.

Foreign Chemical Data

One of the best jobs ever done by the United States Department of Commerce in the area of informative service for business had to do with chemical conditions in Germany after the first world war. Hence, those whose acquaintance with such things goes back more than thirty years can get without difficulty the point of view of the chemical industry of the United States in its desire to get similar information on foreign conditions at the present time. The point of view is clear; although the motivation is not the same as it was in the earlier postwar period when the concern was for the crashing of the domestic markets for chemicals by the German producers who had about controlled them in some areas prior to the war—when the domestic chemical industry was one of this country's smallest in size and importance.

Today's problem is a puzzling one because, in common with many other government agencies, the Department of Commerce has changed variously in many respects since the 1920s. One of those changes, which has brought the Department of State into special prominence in areas of foreign trade services, apparently has made those areas of relatively minor importance among the commerce agency's objectives. There is no other good reason, for example, for the department's discontinuing a short time ago, the issuing of the bulletin, "World Trade News," although it was said that the department's reduced personnel would not permit it to handle the previously free publication on a paid-subscription basis as directed by the Bureau of the Budget.

The well-informed in matters of foreign trade information sources know that that bulletin never was comparable in usefulness with "Foreign Trade," the weekly publication of the Department of Trade and Commerce of Canada, for which a charge of $3.50 a year is made for delivery in the United States, by the Queen's Printer, Ottawa.

Because the chemical industry of the United States must have a world market for a goodly part of its large production, it must know much about world market conditions. Whether the providing of that information is to any extent a task for the federal government is a matter of broadly differing opinions. The extent to which reliable data could be got from published sources in the several more important countries abroad, by the domestic industry's national organizations cannot definitely be determined. The publication of data of the nature of those issued by the British producers of sulphuric acid, for example, is not a common practice. But, the industry could do, at least, as good a job as could be done by any government agency. An investigation of the value-received potentialities of an investment in such an undertaking would seem to be desirable. Self-help is one of the best assurances of self-preservation.

For the Bookshelf

QUANTITATIVE ORGANIC ANALYSIS VIA FUNCTIONAL GROUPS. By Sidney Siggia. Cloth: 227 pages, 5½ x 8½ in. New York: John Wiley & Sons. $5.

This is the second edition of this book, designed to bring the subject of organic analysis by functional groups up to date. At the time the first edition was published, progress was being made so rapidly in these procedures that the book was practically out of date by the time it came off the press.

While the book deals primarily with analytical procedures based on the reactions of functional groups such as hydroxyl, carbonyl, acetyl, amino, groups and most of the others, it does give some attention to the physical methods of quantitative separation of compounds of a given group, from interfering impurities.

This method of group analysis is not all inclusive, since as yet no way has been found to analyze functionally such compounds as the nitriles, isonitriles and higher alkyl ethers. Individual analyses of these compounds can be done, but not as a general procedure.

Washington Talks

—Continued from page 5

quate this year, requiring some reduction in government holdings of linseed oil; prices of cottonseed meal have been rising and the "package" value of cottonseed oil, linters and meal is now near the CCC value; farmers prices for peanuts are near the loan value and next year's peanut acreage is to be held to the legislative minimum of 1,610,000 acres.

Rubber in Latin America

Latin America isn't exhibiting any fears that natural rubber is a dying industry to be superseded in a few years by synthetic production. If anything, the thinking is in the opposite direction—not only will there always be a market for the natural product, but that market will continue to grow. With the synthetic rubber industry in this country about to be turned over to private industry, it appears Latin America plans to give the industry some keen competition.

According to the rubber experts in the Department of Agriculture, interest in rubber planting has increased during the year in Latin America. Government officials and both large and small farm operators have requested added technical assistance. Expansion has been most marked in Guatemala, Brazil, and Peru, with plans for expansion in Mexico and Colombia being definite but somewhat slower in development.

Brazil leads all other Latin American countries in budgetary support of rubber planting and in the acreage of new rubber planted. The Amapa federal territory alone in the Amazon Valley has 150,000 trees growing at stake in the fields and 450,000 trees in nurseries for budding and field planting. This total of 600,000 trees will plant 3,000 acres of rubber. Nursery stocks and field plantings at other locations in the Amazon Valley will make another 1,000 acres. The state of Bahia has nursery stock for planting 1,000 acres and has 200 acres planted with seed at stake.

Heavy Chemicals

Price trend was slightly lower last week, the index recording 98.49 compared with 98.53 in the preceding period. The feeding grade of dicalcium phosphate, which is still holding a competitive position, recorded a moderate decline from its former price level. Magnesium metal sticks were advanced under higher producing and handling costs. The other nonferrous metals were relatively quiet and revealed no important price changes at the close of the week. Fluctuations in tin were fractional and not wide enough to affect the tin based chemicals. Short spot supplies held quicksilver firm with demand off. Activity in the heavy tonnage chemicals remained about steady. Chlorine shipments were of better volume. Caustic soda showed an improved state of balance and the movement in soda ash retained the gain recently noted. Caustic potash and other potash chemicals did not command much attention. Sales of carbon tetrachloride were down. Copper sulphate shipments were confined to industry with agricultural demand nil. The acids maintained a comfortable supply position all through the list.

Domestic production levels of industrially important inorganic chemicals were generally lower for November than those reported for October, 1953, but higher than for the corresponding month of 1952, according to the Bureau of the Census. In comparison with October's figures, the output for 33 of the 39 chemicals currently included in the Bureau's monthly survey totaled less and the November production for only 3 chemicals was larger than for October. However, when compared with November, 1952, volume, larger amounts were reported for 24 chemicals and smaller quantities, for 10.

The November figures for chromic acid, natural methanol and sodium meta-phosphate exceeded those for the preceeding month. In addition the current month totals for ammonia, ammonium nitrate, sulphuric acid, and nitric acid approximated the October, 1953, figures and were greater than those for the corresponding period of 1952. Among the "heavy volume chemicals," sizeable declines were reported in the production of synthetic ammonium sulphate, oxygen and hydrogen. November production of caustic soda declined 5 percent when compared with the October output, but was 2 percent higher than for November, 1952. The output of soda ash, however, totaled less when compared with the previous month's figure as well as with the quantities produced for the corresponding period of 1952. Stocks on hand during November increased for chlorine and all sodium alkalies.

Paper production based on percentage six-day capacity was 95.4 percent for the week ending January 23, according to the American Paper and Pulp Association. This compared with 93.5R in the preceding week and 93.4 in the corresponding week of 1953.

Production figures appearing below, unless otherwise designated, are from the Chemical Division of the Tariff Commission and the Bureau of the Census, Department of Commerce.

Ammonia, Anhydrous — Available for spot shipment at former prices. Expected to tighten when Spring demand gets fully underway. Regardless of increased output some producers believe the demand for direct application will exceed production in April and May. November, 1953, output showed 194,886 tons, compared with 198,536 in October and 178,562 tons in November, 1952.

Calcium Phosphate, Dibasic — Feed grade continues to hold a competitive position with as low as $74 per ton heard for carlots with a range upward to $90, depending upon the producer. November, 1953, production of dibasic was placed at 8,256 tons, compared with 9,229 in the preceding month and 7,476 tons in November, 1952.

Carbon Bisulphide—Demand continued moderate to fair with consumers able to secure spot shipment. It was stated that rayon mills are averaging about 80 percent capacity at present, which is somewhat better than the last quarter of 1953. November, 1953, production totaled 44,222,208 pounds of bisulphide, compared with 39,965,261 in October and 40,554,019 pounds in November, 1952.

Price Trends

Advanced

Magnesium metal sticks, 1c. per lb.

Reduced

Dicalcium phosphate, feed grade, $1 per ton.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
98.49	98.53	98.28	95.62

(For Current Prices see page 9)

Chlorine—Consumer demand has shown some improvement during the month of January, and in producing quarters it was stated that the available supply is not as large as at the close of December. Output of chlorine gas in November, 1953, was placed at 227,830 tons, compared with 239,360 in October and 219,536 tons in November, 1952. Stocks of liquid on hand November 30 were 26,952 tons, against 23,555 on October 31, and 21,444 tons on November 30, 1952.

Copper Sulphate—Agricultural sales remained at a low ebb last week, while the industrial demand continued steady. No new important sales were reported for export. Stocks were ample to meet requirements and prices were unchanged with the metal market not too firm.

Potash, Caustic — Buying interest was not very extensive over the past month. Sales were mostly for actual needs which producers had no difficulty in leveling off. November production was placed at 7,115 tons of liquid, including 1,593 tons of solid, against 7,376 of liquid containing 1,468 tons of solid in October and 6,928 tons of liquid, solid content not available, in November, 1952.

Potassium Carbonate—Market situation remained relatively quiet over the turn of the month. Demand from glass plants has slowed down and inquiry from other sources was not extensive. Supply conditions continued comfortable, with producers in a position to make immediate shipments.

Soda Ash—Market position steady, with the slight gain in shipments noted in the previous week holding over the turn of the month. November, 1953, production of finished light ash was placed at 218,103 tons, compared with 228,703 in October and 234,156 tons in November, 1952. Finished dense ash output in November was 138,917 tons, against 146,107 in October and 153,362 tons in November, 1952. Production of natural soda ash in November amounted to 40,473 tons, compared with 43,217 in the preceding month and 23,841 tons in November, 1952. Stocks of light ash at the close of November amounted to 45,721 tons, against 43,930 on October 31 and 42,289 on November 30, 1952. Stocks of dense ash at the end of November were 51,054 tons, compared with 43,765 on October 31 and 22,267 tons on November 30, 1952. The supply of natural soda ash on November 30 was 37,365 tons, compared with 35,697 on October 31 and 27,232 tons on November 30, 1952.

Soda, Caustic—Demand more active at the close than at the beginning of January, with the market showing a better state of balance. November, 1953, production by the electrolytic process showed 225,064 tons of liquid containing 25,613 tons of solid, compared with a revised total of 240,126 tons, including 23,765 tons of solid in October and 212,500 tons of liquid containing 27,259 tons of solid in November, 1952. November production by the lime-soda process amounted to 37,055 tons of liquid, including 10,293 tons of solid, against 36,287 tons of liquid containing 11,106 tons of solid in October and 44,490 tons of liquid, including 10,707 tons of solid during November, 1952.

Sodium Phosphates—Monobasic production in November, 1953, showed 1,650 tons, compared with a revised total of 1,877 in October and 1,632 tons in November, 1952. Tribasic output amounted to 3,614 tons in November, against 4,370 in the preceding month and 3,470 tons in November, 1952. Meta output was 4,538 tons in November, compared with 4,456 in October and 4,511 tons in November, 1952.

Acids

Acetic—Demand did not exceed moderate limits during January. There was some increase in glacial stocks at the close of the month, with the price trend a bit uncertain. November, 1953, production of acetic acid was placed at 34,776,936 pounds of synthetic, compared with 34,918,361 in October and 37,333,982 pounds

For Late Market Developments, See Page 4

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in November, 1952. The output of natural in November was 1,738,000 pounds, against 1,661,000 in the preceding month and 1,855,000 in November, 1952.

Hydrochloric — Stocks continued adequate to meet consumer requirements. Buying interest remained good and showed little variation over the past month. November production amounted to 64,029 tons, including 15,852 tons made from salt and acid, 12,212 from chlorine and hydrogen and 35,965 tons as byproduct and from other sources. October output totaled 66,494 tons and in November, 1952, production showed 62,178 tons.

Hydrofluoric—Market closed the month in a satisfactory state of balance. November, 1953, production amounted to 4,107 tons of anhydrous and technical, compared with 4,416 in October and 3,327 tons in November, 1952.

Sulphuric—Sales maintaining satisfactory dimensions with stocks fully adequate to meet current demand. November, 1953, production showed 1,207,504 tons, including 242,302 tons made by the chamber process and 965,202 by the contact process. October output was revised to 1,210,900 tons and in November, 1952, production was placed at 1,159,061 tons. The amount of spent acid used in fortification during November was 81,498 tons, compared with a revised total of 85,344 in the preceding month and 82,669 tons in November, 1952.

Nonferrous Metals

Cobalt—Metals, alloys, and chemicals, previously under quantitative export limitations, have been open-ended until further notice, the Bureau of Foreign Commerce has announced. The open-ended commodities are:—Cobalt welding rods and wires (Schedule B No. 619040); cobalt metal powder (B No. 619159); dental alloys and metal in crude form, except scrap, but including cobalt alloys containing 5 percent or more cobalt by weight (B No. 664526); semifabricated forms, including, but not limited to, sheets, rods, strips, tubing, etc. (B No. 664529). Cobalt chemicals, such as reagent grade for laboratory use; combustion catalysts containing cobalt; salts of organic compounds; inorganic compounds; paint and varnish driers, and cobalt-containing pigments (B Nos. 829970, 829990, 839,750, 839900, 843600, and 842900). This action was made possible by the improved supply situation.

Copper—No unusual activity last week. Demand for February delivery was rather slow with buyers showing a disposition to await developments. The price situation did not appear to be too firm with 29½c. to 30c. per pound the prevailing quotation for electrolytic delivered Valley basis.

Electrolytic copper, Mexican export tariff classification No. 81-14, has been granted a 75-percent reduction from the 15 percent ad valorem export surtax. Electrolytic copper had been subject to the full 15 percent advalorem surtax since July 23, 1953, when the previous 80 percent exemption was cancelled. Exports virtually ceased following the July cancellation, and the new measure is expected to enable Mexico's sole producer of electrolytic copper to resume shipments.

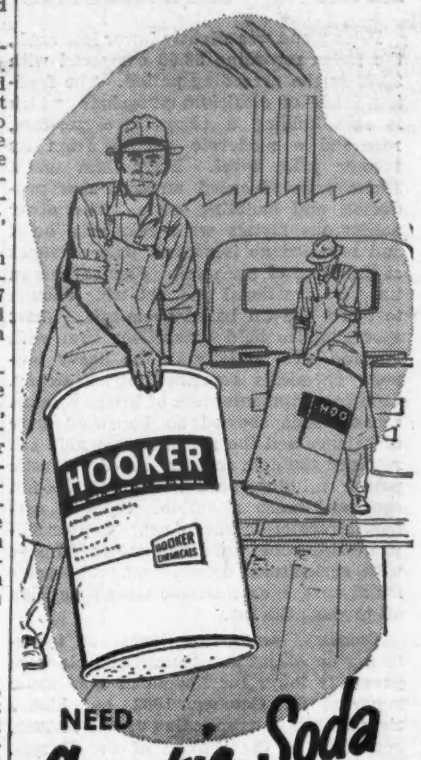
Lead—Demand spotty with sales following moderate lines during most of the past week. There was no change in prices, the common grade being listed at 13c per pound, New York, and 12.80c. St. Louis basis.

Magnesium — Production of primary magnesium ingot at 6,227 tons was about 2% lower than October 1953 and about 32% below November 1952. In June 1953, government-owned plants were closed. Shipment of wrought products for the month of November 1953 at 657 tons decreased about 7% from those of October 1953 but increased 11% from shipments of November 1952. The decrease during November was due to cancellation of some military contracts and a stretch-out of others. Shipments are expected to pick up before spring. These figures are released by The Magnesium Association based on information received from the U. S. Bureau of Census and the U. S. Bureau of mines.

Quicksilver—Steady at $190 to $192 per flask on spot with demand slow. The tight supply position has checked selling pressure and permitted the market to hold firmly at former price levels.

Tin—Fractional price changes featured the spot market last week without disclosing any definite trend. The prevailing price for Straits tin was 85c. per pound on spot with future shipments 1c. to 3c. below that figure. Minor changes in London and Singapore had no effect on the domestic market.

Zinc—Buying interest continued rather quiet with consumers inclined to limit purchases to actual wants. Prices were unchanged with prime western held at 9½c. per pound, East St. Lous and at 10c. delivered New York.



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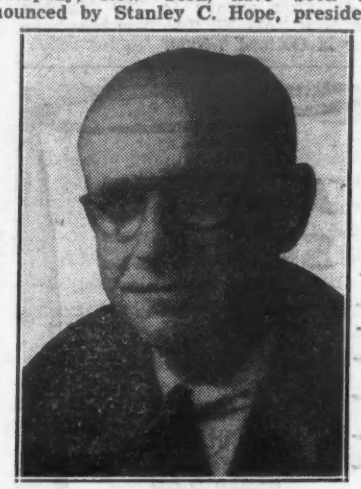
Boyer, Collins Elevated By Esso Standard Oil

Elections of Marion W. Boyer as executive vice-president and Edwin H. Collins as vice-president of Esso Standard Oil Company, New York, have been announced by Stanley C. Hope, president.



Marion W. Boyer

Osgood V. Tracy and Glenn W. Poorman have been elected directors.

Mr. Boyer, who has been associated with the company's manufacturing operations for twenty-five years, has been a vice-president, director and member of the executive committee. He recently returned to the company after serving for three years as general manager of the Atomic Energy Commission.

Mr. Collins, whose career spans more than thirty years in the company's marketing operations, has been a director and member of the executive committee since 1949. He was formerly general manager of marketing.

Mr. Tracy, general manager of the chemical products department, has for more than twenty years been engaged in the commercial development of chemicals from petroleum with the company. He recently completed a term as director of the chemical division of the National Production Authority. Mr. Poorman, general manager of the supply department, joined the company in 1932 and subsequently held posts in manufacturing, marketing and supply and transportation operations and as assistant to the president of Esso Standard.

Nonionic Dyeing Assistants Are Added to Dexter Line

Four dyeing assistants of the nonionic type are being offered to the textile industry for the first time by Dexter Chemical Corporation, New York, Joseph B. Evans, director of sales, has announced.

The decision to enter the nonionic field with polyoxyethylated fatty alcohols came after several years of market analysis and research by Dexter, Mr. Evans said. The products are "Telkanol O," "Dextrol Fast Salt," "Rexan O" and "Telkanite M."

"Telkanol O" is said to be an effective levelling agent and dyeing assistant for wool, and especially for unions of wool and synthetic fibers such as spun rayon, orlon, dacron and nylon, as well as wool and cotton. "Dextrol Fast Salt M" is reported to be a dyeing assistant for acid metallized dyestuffs on wool which reduces the amount of sulphuric acid normally needed, thereby holding to a minimum any loss of tensile strength of the fiber. Level dyeing and penetration with direct, basic and vat dyestuffs is attributed to "Rexan O" on all fibers except wool. Dexter claims "Telkanite M" to be a highly effective stabilizing agent and assistant for all types of napthol dyeing and printing.

Hercules Powder Reports Income Gain During 1953

The 1953 annual report of Hercules Powder Company, issued to stockholders last week, showed net income after all charges of $11,680,854. Net income applicable to the common stock was equal to $4.20 a share on 2,677,955 shares, the average number outstanding.

In 1952, net income of the company was $11,218,120. These earnings were equal to $4.03 a share on 2,672,425 shares of common stock then outstanding. Net sales and operating revenues in 1953 amounted to $190,202,417, compared with $181,516,623 in the preceding year. Income and excess profits taxes took 63 percent of the company's profits.

"The excess profits tax reduced earnings $1.10 a share," Albert E. Forster, president, said in his letter to stockholders. He added that earnings were also reduced 8 cents a share "by a non-recurring charge resulting from a change in the company's vacation plan to recognize liability for vacation pay as earned."

The company continued to grow and expand during 1953, Mr. Forster said, although "the increased physical volume of sales achieved in most of the company's products was offset to some extent by downward price movements in certain lines." The highest outlay of funds for research in the history of the company was disclosed by expenditures of $7,905,000 during 1953. This amount was 24 percent more than in 1952, Mr. Forster noted. The major portion of the 1953 increase in expenditures involved the construction and operation of a pilot plant for the production of DMT (dimethyl terephthalate) and DMI (dimethyl isophthalate) by xylene oxidation, he said.

Lobel Chemical Formed

Lobel Chemical Corporation, New York, manufacturers, exporters and importers of chemicals, has been formed by Irving and Sheldon Lobel. The new firm will deal in chemicals and raw materials for industry, agriculture and public health. Its offices are located at 165 Broadway, New York 6. The phone number is Cortlandt 7-4266.

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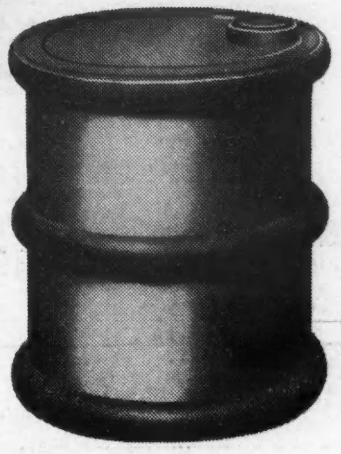

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GSA Announces Data On Strategic Materials

Quantities bought through December 31 under the government's purchase programs for domestic tungsten, manganese, chrome, mica, beryl, asbestos and columbium-tantalum have been announced by the General Services Administration. The programs were established to stimulate the search for and production of strategic and critical materials in the United States.

Purchases of 3,000,000 short ton units (twenty pounds each) of contained tungsten has been authorized and 599,893 ton units have been delivered. Manganese deliveries to date are:—Butte and Philipsburg, Mont., 428,809 long ton units (22.4 pounds each); Deming, N. M., 789,618 units; Wenden, Ariz., 2,089,283 units. Chrome ore deliveries, at Grants Pass, Ore., have been 46,640 long tons. Mica has been delivered in the amount of 2,593 tons, of all types, at various depots. Beryl deliveries have amounted to 145 short tons.

Nonferrous crysotile asbestos has been delivered in the following amounts:—Crude No. 1 and No. 2, 352,000 pounds, and Crude No. 3, 300,000 pounds. Deliveries of columbium-tantalum, foreign and domestic combined, has amounted to 3,485,507 pounds.

AEC Deputy's Position Is Resigned by Williams

The resignation of Walter J. Williams as deputy general manager for the Atomic Energy Commission has been announced by general manager K. D. Nichols.

The resignation ends ten years of continuous service by Mr. Williams as a senior staff member in the atomic energy program under both the War Department and the Atomic Energy Commission. He is taking a position as vice-president of the Taconite Contracting Corporation, which is a subsidiary of the Erie Mining Company. He will be in charge of the construction in the new taconite producing areas being developed by that company in the Lake Superior area north of Duluth, Minn.

Hurst & Co. Executive Here in April

Henry Risner, managing director of A. Hurst & Co., Ltd., London, will arrive in this country about April 5 on a thirty-day business trip. Mr. Risner's mission in this country will be to seek agencies for American raw materials for the United Kingdom. His address, while in this country, will be 30 Country Club lane, Wallingford, Pa.

Stauffer Moves N.Y. Headquarters

Stauffer Chemical Company today moved its New York headquarters from 420 Lexington avenue to 380 Madison avenue, New York 17. The new telephone number is OXford 7-0600.

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Diamond Appoints Combs Chromic Acid Sales Head

Promotion of Eugene L. Combs to the position of supervisor of chromic acid sales for Diamond Alkali Company, Cleveland, Ohio, has been announced by John S. Cort, jr., sales manager of Diamond's chromium chemicals division.

Mr. Combs joined the Diamond organization in 1950. Since then he has been handling varied assignments in technical service, particularly those related to applications of chromic acid and its use in chromium plating. From 1942 to 1947, he was assistant supervisor in the electrochemical engineering division of Battelle Memorial Institute, Columbus. Previously, he was associated in various production capacities with the Curtiss Wright Corporation, airplane division, at Columbus, and also with D. L. Auld Company, Columbus.

Wyandotte Appoints Healy

Lawrence J. Healy, jr., has been appointed a technical service representative of Michigan Alkali Division of Wyandotte Chemicals Corporation, Wyandotte, Mich. As a member of the department, Mr. Healy will be concerned with helping to establish and maintain standards for product quality, packaging, labels and shipping requirements. In addition he will assist customers by making surveys and recommending improved material handling procedures and processing or application of Wyandotte products.

Nuodex Creates New Dept.

Nuodex Products Company, Elizabeth, N. J., has announced the creation of a new commercial development department, with Edward D. Horgan as director. The function of this department, according to Leo Roon, Nuodex president, is to devise and explore methods for the market introduction of new products and find new applications for established products.

Emulsol Appoints Stone Co. Agent, Publishes Pesticide Emulsifier Data

Emulsol Corporation, Chicago, has selected E. C. Stone Company, Denver, Colo., to act as its technical sales representative in the Rocky Mountain states area. At the same time, Emulsol has announced availability of a new technical bulletin describing "Emcol H-83A," as modified type of pesticide emulsifier for toxaphene, chlordane, malathion plus DDT, and certain herbicides. The bulletin is available upon request from the company at 59 East Madison street, Chicago 3, Ill.

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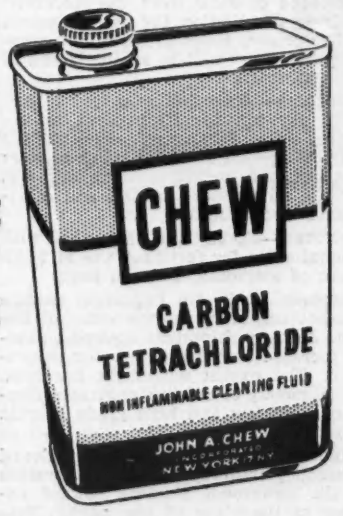

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Agricultural Chemicals

Price trend continued upward last week. The index recorded 111.41, compared with 111.25 in the preceding period. Dried blood was not unusually active but limited offerings with no selling pressure resulted in an uplift of prices. Tankage was higher at Chicago and firm and unchanged in the local market. Demand came from the stockfeed trade and was accelerated by the strength in vegetable oil meals. Menhaden meal and scrap were established at higher selling levels in the Baltimore area. Trading was also relatively quiet while limited offerings forced buyers to pay higher prices. The demand was said to be for poultry feed use. Castor pomace was more active and so was domestic steamed bone meal although no price changes were recorded.

A modest increase in the movement of mixed fertilizer was reflected in better shipments of the basic fertilizer chemicals. The improvement in demand for ammonium sulphate continued with no apparent tightening of supplies. Interest was still maintained in the Korean purchase where complicated bids have delayed the army from determining the results. Superphosphate commanded more attention with room for improvement. The increase in potassium muriate withdrawals was sustained. Some producers state there is a possibility of a bottle neck in March if the demand for prompt shipment overflows loading facilities.

Production figures appearing below, unless otherwise designated are from the Chemical Division of the Tariff Commission.

Fertilizer Materials

Ammonium Sulphate—Domestic shipments continued to show a gradual increase with a tendency toward expansion while the supply situation remained comfortable. The bids for the 208,000 long tons for Korea have been opened and the results will be known in a few days. According to trade reports, about 20,000 tons of domestic sulphate is expected to be placed in the American market although it was estimated that bids were submitted for 26,000 tons of foreign material at U. S. ports. The bids are said to be complicated and it will take some time for the Army to make its final interpretation.

Bone Meal—More active for stockfeed use. Sales of domestic steamed of fair dimensions are reported on the basis of $55 per ton f.o.b. the works.

Castor Pomace—Market steady under an improved demand for fertilizer use. Sales reported at $25 per ton, bagged, carlots, works.

Dried Blood—Short available stocks and an increased demand from the stockfeed trade have resulted in the setablishment of higher prices. Sales in New York were reported at $8 per unit of ammonia and at $8.25 in Chicago.

Fish Meal—Menhaden is priced higher at $136 per ton for 60 percent in the Baltimore area. Scrap was priced at $130 to $131. There has not been much activity throughout the month of January but there was no pressure to sell and offerings have been limited.

Hoof Meal—Steady and unchanged with occasional sales for fertilizer use at $6.75 per unit of ammonia, Chicago basis.

Phosphate Rock—No important change in market conditions at the close of the month. January shipments showed a moderate increase over December for domestic use. The export movement has been confined mostly to existing contracts. Supplies of both low and high grade Florida rock remained comfortable.

Potassium Muriate—January occasioned a general pickup in tonnage shipments with the movement slanting toward expansion at the close of the month. Producers are confident of a substantial demand in February with the possibility of a bottle-neck in March if demand continues to improve.

Sodium Nitrate—Showed a stable setup at the close of the month. There has been a modest pickup in demand but the spring movement has not got underway to date. Meanwhile, supplies have been built up at various stockpoints in anticipation of the seasonal drive.

Superphosphate—Shipments continue to gain gradually although some producers admit that the movement is not what it should be at this period of the year. It is expected demand will increase with the advent of Spring and will reach its peak in March. Meanwhile, the supply position is comfortable with prices generally steady.

Tankage—Position firm under light offerings with an advance in price recorded in the midwest. The recent uplift in vegetable oil meals contributed strength to the tankage market. Sales for stockfeed use were reported at Chicago at $7.50 per unit of ammonia. New York was unchanged at $6.75.

Price Trends

Advanced

Dried blood, 50c. per unit of ammonia, New York, 25c. Chicago.
Menhaden meal, $3 per ton.
scrap, $1 per ton.
Tankage, Chicago, 25c. per unit of ammonia.

Reduced

None

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
111.41	111.25	111.23	112.77

(*For Current Prices see page* 9)

Los Angeles Market

Los Angeles.—A slight slump in market activity during the week was attributed to the arrival of heavy and long-awaited rain in the Southern California area. Although demand was good, actual movements of material have been slow. The trade was of the opinion that business is actually off some from last year but no figures are available. Blood meal held little interest but remained strong. Imported fish meal was stronger due to diversion of incoming shipments to Gulf ports. Castor pomace increased slightly as new production made spot material available.

Ruling prices were:—Ammonium nitrate—$90.50 per ton, domestic, f.o.b. Los Angeles, $9.84 per ton, Canadian material, f.o.b. Los Angeles.

Ammonium phosphate—$80.14 per ton in bags, 16/20 grade, f.o.b. Los Angeles. $107.64 per ton in bags, 11/48 grade, f.o.b. Los Angeles. Both Canadian material.

Ammonium sulphate—$55.93 per ton in bags, domestic, f.o.b. Los Angeles. $3 less in bulk. Canadian material same.

Blood meal—$7-$7.25 per unit of ammonia at source. Bone meal—$64-$70 per ton, imported, 1/65 meal, c.i.f., Los Angeles Harbor. Domestic—$90-$92 per ton, f.o.b. Los Angeles.

Calcium nitrate—$48 per ton, 15½c. percent nitrogen, c.i.f., Los Angeles Harbor.

Fish meals—$2.35 per unit, domestic, sacks included, f.o.b. San Pedro. $2.30 per unit, imported, ex-dock, Los Angeles Harbor. $2.05-$2.10 per unit, Canadian herring meal, bagged, f.o.b. Vancouver, U. S. Funds.

Pesticides

BHC maintained a firm position with export inquiry increasing for South American shipment. Domestic formulators are expected to enter the market late this month or in March. DDT for domestic use also remained steady at the late advance. While details have not been announced it is understood that several producers have complained about the awarding of bids for the 1000 metric tons of 75 percent wettable DDT for export to Iran. The season is too early for the establishment of prices for cotton dust. Aside from domestic demand this material usually finds an active outlet in Mexico where the cotton growing season is similar to the American. The popularity experienced by methoxychlor last year is expected to extend through 1954. Judging from the price of basic materials, the trade is looking for no important price changes in calcium arsenate or lead arsenate when the season opens.

In a government report from Arizona, it was stated that gin trash inspection completed December 18, 1953, no new infestation of pink bollworm was found and a lighter infestation was indicated within the regulated counties.

BHC—November, 1953, production was partially estimated at 2,811,721 pounds, compared with 2,629,906 in October and 1,894,945 pounds in November, 1952. The gamma isomer content in November amounted to approximately 383,551 pounds, against 418,436 in the preceding month and 460,451 pounds in November, 1952.

DDT—Output in November, 1953, was placed at 6,056,608 pounds, compared with 4,551,759 in October and 5,546,080 pounds in November, 1952.

2,4-D—Production in November, 1953, showed 1,652,273 pounds, October output not available but in November, 1952, production amounted to 1,772,733 pounds. There were 1,310,894 pounds of acid esters and salts made during November, against 1,106,470 in the preceding month and 1,772,733 pounds in November, 1952. The acid equivalent of 2,4-D acid and salts made in November was 1,382,198 pounds, against 1,581,120 in October.

For Late Market Developments, See Page 4

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United Fertlizer New Name For Company in California

United Fertilizer Company, Richmond, Calif., is the new name for the Agricultural Chemicals Service Company. The change was made to be more descriptive of the firm's functions, the distribution of commercial fertilizers. It also ties in with advertising of United Chemical Company, which supplies commercial insecticides, fungicides, and kindred products to farmers in the five Pacific states.

Personnel and officers remain the same as for the other two firms, Heckathorn & Co. and United Chemical Company. Heckathorn is the manufacturing unit for the two United companies.

NACA March Parley

—*Continued from page 7*

is expected to point up the importance of insecticides, fungicides and other agricultural chemicals in the progress of Texas agriculture.

J. A. Walker, credit manager of Standard Oil Company of California, San Francisco, is scheduled to discuss the credit situation as it pertains to the agricultural chemicals industry.

Dr. Stanley B. Freeborn, Provost of the Davis California Station of California College of Agriculture, will present an address on the value of pesticides and their contribution toward raising standards of living by improving the public health and by improving the quantity and quality of food in the United States. Dr. Freeborn's address will complete the business activities of the association on the first day.

The evening of March 24 will be devoted to a reception for members and guests of the group. Both the March 25 and 26 business sessions will be restricted to members and invited guests only. A gulf tournament will be held March 25 and either a banquet or barbeque will be held that evening for association members and guests.

Lubrizol Company Plant Opened

The newly constructed plant of the Lubrizol Company of Canada, Niagara Falls, Ont., has officially opened. The plant will manufacture oil additives and other chemicals.

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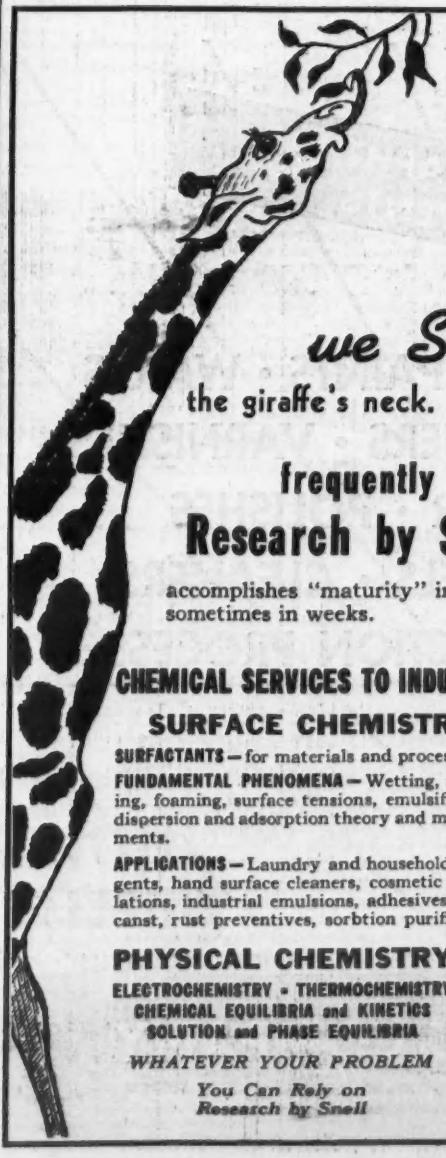

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Petroleum Derivatives

Colder weather has brought a stronger demand for liquefied petroleum gases and light fuels. Scattered advances have been noted for kerosene, diesel oil, and light fuel oils. Contract prices for propane and butane were firmer last week.

Price schedules of solvents and diluents, petroleum waxes and other petroleum chemicals have held firmly to former listings. Supplies of aromatics have eased up enough to allow all consumers to get what they need for their own consumption. Some producers even added that they would like to see a stronger industrial demand than there was right now for aromatics. Reduced government needs of toluol have greatly improved the supply picture. Xylol was readily available. Contract commitments for benzol continued to keep the material moving. Overall supplies in the market have eased up. Shortages have long since disappeared. Demand for benzol now was soft.

Buying interest for aliphatics was about the same as it has been. Most sources find that they could handle a little more business. One producer said demand for mineral spirits was fairly good while another would say that it rated demand a little on the slow side. Sales of VM&P naphtha were from slow to moderate.

Demand for petroleum waxes was unchanged. Producers said that it was not quite up to the peak of the previous month, but there was no excess of material in the market. Fully refined paraffins were not in tight supply. But, sustained domestic demand took all production so that there was still unsatisfied export demand, particularly for sale in Mexico.

Solvents and Diluents

Benzol—Many consumers who have been tied to strong, long-range contracts for the purchase of petroleum benzol were being allowed to defer deliveries through the extension of the contract or writing of new ones for later deliveries, according to reports in the trade last week. It was said that the consumers are not being let off the hook without penalties. Some consumers would not have to take anymore benzol for six months or a year, or more, at which time many trade members felt, most of the surpluses will be eliminated and demand will be on the upswing once again.

The situation has come about as continued high production of coaltar and petroleum benzol supplied all consumption requirements, in addition to building up a backlog of supplies of the raw material held by producers and consumers and end products held by consumers. It was understood that one producer would allow its consumers to defer all commitments, another source will probably allow its buyers to cut their commitments in-half, with a price cut on the remainder, and another supplier was planning to give some sort of price relief to the consumers. Buyers claimed need of price relief because of competition from firms solely using coaltar material at a lower price, it was said.

Variations in benzol suppliers' attitudes towards the situation were partially explained by the amount of money they had invested to build plant equipment for output of aromatics and how much has already been recovered in long-range contracts which have been in effect from a number of years down to less than six months. Many feel that the long range view for benzol was good and demand will expand several times in years to come. In this view, profits made in the past with higher-priced petroleum benzol will have to be averaged out with lesser profits which are being made now that there is a greater accent on the spread between coaltar and petroleum material. Then again, the entire picture may again be evened out by future exansions of demand and a further need for petroleum benzol at any price, it was said.

Mineral Spirits—Demand for this material was about the same as it has been in past weeks. Some sources said that sales were fairly good, but not really high. Other producer stated that activity was a little on the slow side right now. Prices held at old levels.

Toluol—Producers reported that supplies of this aromatic continued to become more available than they had been just a few months ago. Most consumers found that they were able to get all of the solvent that they needed without any difficulty. Some sources stated that demand was not as strong as they would like to see it. Defense needs have been cut back and have shown no definite inclination to pickup again. Prices have held firm at former listings.

VM&P Naphtha—The market picture for this material was unchanged. A few sources reported sales at a relatively slow pace, while one or two reports placed demand at a moderate level. Price schedules were maintained at former quotations.

Xylol—Demand for this aromatic was slightly less than it was for toluol. Supplies have improved since the pressure came off aromatics. Enough material was obtainable to meet all current consumption requirements. Prices have remained firm at previously established quotations.

Lighter Fractions

LPG's—Demand for propane and butane has been much stronger since the colder weather set in. Underground storage was now being moved at a good pace. Surplus spot materials has disappeared. Contract prices have firmed up.

Current quotations were advanced ½c. to 4½c. per gallon for industrial butane and 4½c. per gallon for commercial butane, both in the group three area.

Waxes

Microcrystalline—Buying interest was felt to be just slightly under December demand. Sales have not fallen off to the point that yielded an overabundance of material. Demand was still strong enough to keep the market in an approximate balance. In fact, one or two melting points were still a bit snug with a few producers. Prices were still at former levels.

Paraffin—Demand was not quite as strong as it had been during the closing weeks of 1953. Some of the purchases then were due to consumer efforts to beat raises in package differentials. However, tankcar schedules did not go up and demand for large volumes was a shade lighter this month too. One of the factors behind the consistent tight supplies of paraffin waxes was the cutbacks in lubricating oil production which took place last year.

Miscellaneous

Light Fuels—Recent increases of kerosene, diesel oil, and furnace oil resulted from perked up demand brought on by colder weather. Kerosene, 41-43 s.g., at gulf ports came up to a range of 9.125c. to 9.75c. per gallon. At New York Harbor the price was 10.8c. Diesel oil at New York Harbor was now a straight 10.2c. with all suppliers. Scattered changes in numbers 2 and 3 fuel oil and for range oil took place in New York, Arkansas, and in group 3.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended January 16 totaled 269,576,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 270,578,000 barrels for the preceding week, this represents a decrease of 1,002,000 barrels comprising a decrease of 1,293,000 barrels in stocks of domestic crude and an increase of 291,000 barrels in stocks of foreign crude.

Price Trends

Advanced

Butane, indust., grp. 3, ¼c. per gal.
Fuel oil, diesel, N. Y. Harbor, 0.3c. per gal.
furnace, Ark., No. 3, 0.125c. per gal.
N. Y. Harbor, No. 2, 0.3c. per gal.
Group 3, No. 3, 0.125c. per gal.
range, 0.125c. per gal.
Kerosene, Gulf ports, 0.125c. per gal.
N. Y. Harbor, 0.3c. per gal.
Propane, commercial, grp 3, ½c. per gal.

Reduced

None

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Feb. 2, 1953
105.43	105.31	105.35	104.13

(For Current Prices see page 9)

For Late Market Developments, See Page 4

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N. Y. Paint Club Told of US Tie With Foreign Research

The stability and expansion of the American economy is far more dependent, in the long term future, on natural resources and on basic scientific research derived from other countries than has been generally realized, Dr. William H. Stead, economic consultant on natural resources, told the luncheon meeting of the New York Paint, Varnish and Lacquer Association January 28 at the Biltmore hotel, New York.

For example, Dr. Stead emphasized, much of the theoretical basis of atomic research had its origin in pure research done by European scholars. He also called attention to the increasing degree to which this country is dependent on other nations for essential strategic materials.

Turning to the purely domestic economic picture, he said that in his opinion we are much better equipped to deal with adjustments needed to offset either a short-term recession or a long-term depression, neither of which he regarded as a likely possibility in the near future. The United States is not now and will not enter into anything approaching a depression of the type which occurred in 1927, 1907 or 1893.

Western N.Y. Paint Technicians Meeting Tonight to Hear Prentiss

The Western New York Paint and Varnish Production Club will hold its next meeting tonight in the 40 & 8 Club, Buffalo, N. Y., starting at 7 p.m. The guest speaker will be Dr. W. H. Prentiss of Rohm & Haas Company, Philadelphia, who will discuss "New Acrylic Resins for Coatings."

Glidden Naval Stores Div. Expands Two of Its Plants

Installation of additional chemical production equipment at Glidden Company's naval stores division plants at Jacksonville, Fla., and Valdosta, Ga., and plans for still further expansion of these facilities have been announced by Paul E. Sprague, Glidden vice-president.

"The present addition and the projected further expansion call for an investment of close to $500,000," Mr. Sprague said.

"The now completed new facilities at our Jacksonville plant are expected to help satisfy the steadily increasing industrial demands for terpene chemicals, particularly synthetic pine oil, synthetic dl-limonene, also known as chemical dipentene, myrcene and paracymene," he explained "and new equipment at our Valdosta plant will greatly increase production of rosin-based and other synthetic resins and related products."

Osborn Names Agent

C. J. Osborn Company, New York, has appointed Fred L. Brooke Company its agent in Chicago for the Osborne line of special resins, pigment dispersions and pigments. Brooke will offer warehouse service.

Alox Bought by Surpass

Alox Corporation, Niagara Falls, N. Y., has been purchased by Surpass Petrochemicals Co., Ltd., Scarborough, Ont. Philip G. Kaye of Buffalo Kaye Chemical Company, Buffalo, N. Y., has been elected secretary-treasurer.

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Coal Chemicals

Price schedules of coaltar products remained steady during the past week. A number of sources said that they felt that the general trend was towards an increase of demand so far this year. Some producers said that business was good currently. Others, while admitting that sales were relatively good, said that demand lacked that dynamic character which normally accompanies an expanding market. Buying interest for intermediates was reported as being fairly good in spots. Some intermediates were doing better than they were in the last quarter of 1953, a few have picked up exceptionally well, and some were still on the slow side of the picture.

Demand for the tar acids continued to be good, according to a few sources, while others said demand was only fair. The number of calls for cresols and cresylic acid from cresylic resins has not fallen down. However, all fractions of tar acids do not continually draw strong interest from this outlet. Buying interest from TCP for metapara isomers has held up well, but inquiries have fairly well tapered down to the regular sources of supply of the phosphate. Supplies of metapara were not as tight as they had been for a while. Stocks of ortho were ample to take care of more orders than are available.

Creosote consumption remained slightly under production levels. Phenol moved a trifle better. Demand for naphthalene has picked up since prices were reduced. Buying interest for industrial refined material was improved. There was also the beginnings of a little packaging for the moth control season. Pyridin and phthalic anhydride showed an increase in demand since cuts in their schedules took place. No changes were noted in the markets for light oils.

The operation rate for the steel industry was scheduled to be at 73.8 percent of theoretical capacity, or at a production index rating of 109.6 (1947-49=100), during the week ended January 31, according to the American Iron and Steel Institute. This was equivalent to 1,760,000 tons last week compared with 1,766,000 tons the prior week, 1,706,000 one month ago, and 2,240,000 tons one year ago.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
114.56	114.56	114.56	113.22

(*For Current Prices see page 9*)

Basic Products

Benzol—Soft market conditions continued to exist for this light oil. Reduced call for use in the rubber industry has resulted in a long supply position for benzol. Demand from insecticides was not strong all last year. Buying interest from pharmaceuticals, textiles, and intermediates have not been particularly strong. However, much of the disinterest was the result of inventories of finished products and raw materials held by consumers. These stockpiles were in the process of being reduced now and when they are cut to a reasonable level, buying was expected to pick up once again. Many sources felt that consumption was due to buildup in a long range view, and therefore look at current inventory problems as only a temporary feature of the market. Other trade sources were less optimistic and felt the market would be slow to show much improvement.

The likely spots to look for improved benzol demand were at the markets for styrene and phenol, two of the largest consuming outlets. Styrene was showing improved activity over fall levels and phenol moved at a slightly better pace. Price reductions in phenol and phenolic resins have helped to push demand along, but there was still room for more activity.

Creosote—The overall picture of the market was relatively unchanged. Trade reports varied from "fair, steady, sales" to a market which was a "little slow." As was normally expected at this time, production was running ahead of consumption, it was said. Prices were firm at previously established listings.

Cresols—Demand for these tar acids has held up fairly well. Suppliers' views of the strength of demand varied slightly, from "steady" to "good." It was said that sustained call from cresylic resins has kept activity alive in this market. A good call for metapara isomers was also noted from tricresyl phosphate. Orthocresol remained in relatively long supply. There did not appear to be any more extremely tight spots in supplies of other fractions. There was just good business and producers were able to supply incoming orders. Price schedules remained firm at old levels.

Cresylic Acid—A steady demand from cresylic resins and tricresyl phosphate maintained a fairly good position for this tar acid. Additional material was still moving to aircraft engine cleaner business, but competition for this outlet remained sharp. Several sources said they have not been able to get any cleaner business because of low prices offered by competing suppliers. Domestic coaltar and petroleum acid has been moving in this direction as well as a good volume of imported ADF cresylic. No changes were noted in the price picture for domestic or imported material and none were anticipated.

Naphthalene—Producers have indicated a slight pickup has come about since the lowering of quotations recently. A small steady increase was noted in activity for industrial refined naphthalene in recent weeks. There also has been a slight increase in interest for ball and flake material. It was said that the beginning of a little movement of ball and flake for packaging was noticed by suppliers. Sales for packaging were expected to pickup momentum as the season for moth control approaches.

Importers said that the market for 78-degree hot-pressed material was very quiet. The 5c. domestic crude price was offering stiff competition here and supplier resistance to low prices minimized the amount of naphthalene offered in Europe for resale in this market. It was said that some 78-degree material could be obtained if you went after it, but none was being freely offered.

Phenol—Producers reported that a fair demand for phenol held the market to a steady pace. Demand was slightly better than it had been, following the recent price reductions. The volume of business was not quite as good as producers might like, but the pace was felt to be a bit above last year's mark for this time of year. Increased production already on the market and new facilities which are on the way indicated that buying interest will have to expand faster if a buildup of inventories is to be prevented.

Natural phenol was currently moving a little faster than synthetic material. Recent cuts in prices of phenolic resins were expected to reflect more of a pickup in demand for phenol as consumer inventories are cut down further. Resins were currently moving at a much improved pace. It should only be a matter of time before some results show up in the market for phenol, it was felt.

Production of technical and USP grades of phenol in November amounted to 29,251,051 pounds, whereas the total for synthetic and natural material put out in October was 30,699,788 pounds, information from the Tariff Commission relates.

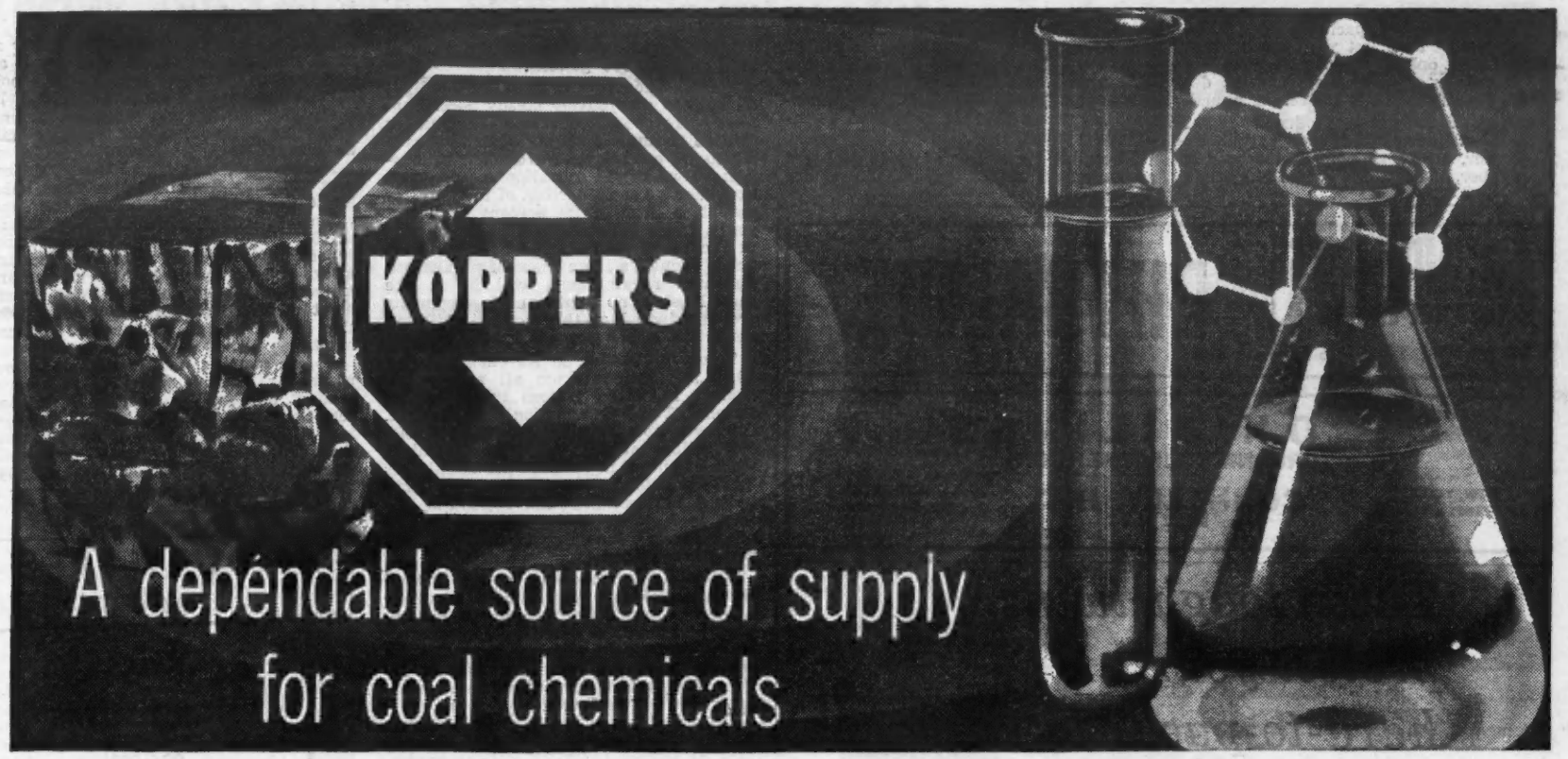
Pyridin—Slightly more interest has been noted in the market for this tar base by some sources in recent weeks. Producers said that there has not been a strong surge of buying. But, some consumers who had been holding back were now in the market once again. Recently lowered prices were felt to have something to do with the improvement in demand. It was said that many buyers he'd off prior to the cut in schedules in anticipation of a price move, and now that the revisions have taken place they were free to buy what they wish without expecting to find prices

Production Estimate

Estimated output of coal chemicals recovered from cokeoven operations during the week ending Jan. 31, was as follows:—

Ammonia liqid, NH3	lbs.	822,746
Ammonium Sulphate	lbs.	29,736,280
Benzol	gals.	2,844,349
Coaltar	gals.	13,046,396
Creosote oil	gals.	728,718
Naphthalene, crude	lbs.	2,009,850
Pyridin, refined	lbs.	21,156
Toluol	gals.	559,467
Xylol	gals.	149,270

For Late Market Developments, See Page 4



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are lower later. Consumption of refined 2-degree material was estimated as being rather substantial and at a steady pace. Pyridin production capacity is higher than it was at this time last year. However, it was felt that only a part of present capacity was being used to meet current demand. Prices were firm at 95c. per pound.

Cokeoven operators produced 24,131 pounds of refined 2-degree pyridin in November, compared with 64,499 pounds in October, and 126,300 pounds in November, 1952, Bureau of Mines figures indicate. Although total production of refined material was reduced in the late months of last year, the cumulative total for the first eleven months ran ahead of 1952 by 228,705 pounds. Output in the 1953 period was 1,308,605 pounds, while production in the January through November period of 1952 amounted to 1,079,900 pounds.

November production of crude tar bases amounted to 33,033 gallons, on a dry basis, as against 34,971 gallons put out in October, and 43,400 gallons in November, 1952. The cumulative total for eleven months was 500,485 gallons, whereas production in the corresponding period of 1952 was 374,500 gallons.

Toluol—Industrial demand for this light oil held to a relatively steady pace. Supplies were about balanced once again as civilian consumers did not find it impossible to get enough toluol for their production. Government nitration needs were now running at 50 percent of total coaltar output, a drop of 20 percent from last year's levels. No changes were anticipated in the toluol market as long as defense needs acquire a large share of production. February requirements will be at the same level, so no significant developments are anticipated at the moment. Military needs for March are not known yet.

Toluol production in November totaled 10,471,026 gallons from all sources, as against 13,562,647 gallons turned out in October, Tariff Commission figures relate. Cokeoven operations accounted for 3,066,803 gallons of the total, in November, whereas output in the previous month was 3,176,099 gallons. The remaining 7,404,223 gallons in November and 10,386,548 gallons in October were produced by all other sources, including tar distillers and petroleum operators.

Xylol—Consumers were able to get all the material that they needed for their immediate production requirements. Supplies of xylol have eased up considerably since the pressure came off aromatics. No further shortages were forseen at this time. Prices have remained firm at previously established levels.

Output of crude xylol from all sources in November amounted to 9,925,013 gallons, as against 10,526,717 gallons produced in October, figures from the Tariff Commission indicate.

Intermediates

Anilin — November production totaled 6,682,434 pounds, compared with October output of 7,224,320 pounds, Tariff Commission figures indicate. Demand for anilin has held up fairly well. Supplies were adequate. Prices remained unchanged.

Monochlorobenzene — No changes were noted in this market. Producers said buying interest was still very small. Sales were expected to pick up later in this quarter when DDT production gets underway.

Total output of mono in November was 23,878,379 pounds, as against 26,822,278 pounds produced in October, information from the Tariff Commission indicates.

Phthalic Anhydride—A pickup in demand from alkyd resins was noted in the market for this intermediate in recent weeks. Phthalic producers have said that January sales were turning out to be better than they had anticipated. The lower price of phthalic was felt to have added impetus to the current increase in demand. Buying interest from plasticizers remained a bit on the slow side.

Total production of phthalic from all sources was 18,847,588 pounds in November, compared with 16,235,498 pounds produced in October, Tariff Commission figures indicate.

Styrene—November output of monomer by government and privately owned plants combined was 52,661,799 pounds, while October production totaled 52,186,712 pounds.

Cyanamid Names Managers For Plant in Bound Brook

The appointments of M. N. Gaboury as plant manager and F. B. Manker as assistant plant manager of the Bound Brook, N. J., facility have been announced by L. C. Duncan, general manager, organic chemicals division, American Cyanamid Company.

Mr. Gaboury was associated with Newport Company, Swann Company and Bakelite Company before joining the organic chemicals division of American Cyanamid in 1933. Mr. Gaboury worked in various supervisory capacities in the manufacture of azo and vat dyes. In 1950 he was promoted to manager of the color department of the Bound Brook plant, a position he held up to his present advancement.

Before coming to the Bound Brook plant, Mr. Manker was general superintendent of Canadian operations for Barrett Company, a division of Allied Chemical & Dye Corporation. He has been managing various manufacturing units since his arrival at Bound Brook in 1941. He was appointed production manager of related coaltar products in 1952.

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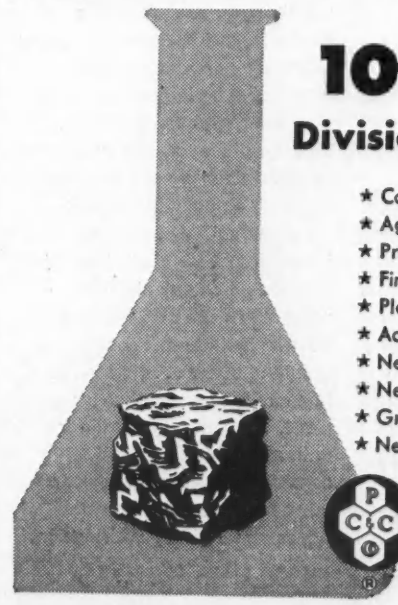

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Textile and Leather Chemicals

On both textile chemicals and on tanning materials for the leather industry, trading was generally reported as slow, reflecting the current lull in these consuming industries. Almost without exception, the supply position of these items was quite adequate. Business in tannin containing compounds was said to be currently off from the level of the last two months, but inquiry and buying interest at the end of the month was such as to indicate that the next few weeks would see an improvement in business volume.

After the sharp declines in the last few weeks in egg albumen, reflecting the soft position of frozen egg whites, the feeling in the market was that albumen had about reached its bottom. Bichromates, acetates, and hydrosulphite were moving in a well sustained demand, but at moderate volume. The same was true of sulphonated oils. On these items consumers were taking advantage of the readily available supply for prompt shipment, and avoiding the carrying of substantial inventories. Dextrin and starches were firm, despite light and spotty demand.

Price Trends

Advanced
None
Reduced
None

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
97.89	97.89	98.71	102.12

(*For Current Prices see page* 9)

Chemicals

Chromium Acetate—There has been no change from the 8½c. drum price on the 7½ percent solution in recent weeks, and producers advised that they foresaw no change in the immediate future. Demand was steady at moderate volume against quite adequate supplies.

Sodium Bichromate — Business volume was regarded as fair, but purchases were largely for immediate requirements only, and buyers were not inclined to carry much inventory because of ready availability from producers. Demand from such industries as pigments was somewhat better sustained than business from the tanning industry, some quarters reported. Prices were unchanged, and expected to hold for the immediate future.

Sodium Hydrosulphite—This item maintained a steady price position, which was not expected to change in the near future. Demand was described as hardly more than moderate, against a plentiful supply position.

Sulphonated Oils — Business volume seemed to drag, according to most quarters. Trading was confirmed largely to immediate needs and prices were unchanged.

Sizing Materials

Blood Albumin—Industrial demand for this item was reported to be just about the same as it had been recently. The shipments against orders were considerably below the capacity of the industry to produce, so that the supply position could be considered abundant. There was a steady flow of business at moderate volume, and prices held unchanged from those prevailing over recent weeks.

Corn Dextrin—All grades were firm and unchanged in a market characterized by a well sustained demand against quite adequate supplies. In 100 pound bags the carlot price of gum was $8.95 per cwt., canary, $8.69, dark $8.79, and white $8.53. The usual 15c per 100 pounds higher differential for less than carlot quantities was unchanged.

Egg Albumen—Frozen egg whites were reported as still soft, and this held the potential of possible further weakening of albumen, but this was not reflected in last week's price pattern, which held to that of the previous week. There was a fair possibility, according to trade sources, that after the recent sharp declines, the price structure had about reached its low. While trading was still quiet, it was certainly not any slower last week, and any upturn in demand would have a stabilizing influence on prices. For the moment, trading was largely confined to relatively small quantities for immediate needs.

Liquid egg production during December, 1953, totalled 14,031,000 pounds, compared with 6,579,000 pounds in the same month of the previous year. This made the current quantities available for consumption, drying, and freezing very much larger than a year ago, which accounts for the soft position mentioned above in frozen albumen and has an adverse effect on the albumen market. This is shown by the fact that in the actual frozen egg production, December's output was the largest on record for the month, amounting to 10,386,000, compared with 4,990,000 pounds a year ago. Frozen albumen disposal in 1953 was 4,467,000 pounds, as against 1,170,000 pounds in 1952.

Flake quotations ranged, according to quantity and seller, from $2 to $2.04 per pound, and powder was as usual 4c. per pound over flake. Technical remained unchanged at $1.03 to $1.06.

Egg Yolk—The feeling was expressed last week that prices on this item had apparently reached their peak, and following a period at current levels, might tend to decline, as indicated by a 4c. drop as reported the previous week. The level of $1.41 to $1.46 established at the midmonth, remained unchanged at the end of the month. Demand was light and spotty, but dealers and producers felt that the market had held its own well during the week.

Potato Starch—After the drop of ¾c. per pound effected the previous week, said to reflect lower mill costs, the market tended to hold last week, and trade sources felt that if there was to be any further easing off of prices, that it would be gradual. Demand was said to be encouraging, especially on the spot market, and future business prospects looked to considerable volume.

Tanning Materials

Chestnut Extract—Demand for this item was said to have eased, as compared with the previous two months. However, there was no change in price patterns, and 25 percent tannin liquid material was quoted at 4¼c. per pound in tankcars on an f.o.b. basis. On the same basis, barrels were quoted at 5.10c. in carlot quantities, and 5.43c. in less than carlot quantities. Powdered was firm at 10.92c. per pound in carlot quantities packed in bags, while bag less than carlot shipments were listed at 11.65c. per pound.

The present low demand was regarded as a temporary lull in the market, and producers felt confident of an improving demand in the months immediately ahead.

Cutch—Trading was limited, due in large part to the scarcity of offers from primary markets. Accordingly, the price position was strongly held at 8½c. per pound, ex dock, plus duty. The scarcity did not too adversely affect the industry, however, because of the ready availability of other tanning materials.

Fustic—Crystal extract was unchanged at 47c. per pound for No. 1, and ranged downward to 43½c. per pound for the No. 3 grade. The liquid grades from No. 1 to No. 3 ranged from 22½c. to 19c. per pound depending upon the grade. Solid was firm at 45c. Demand was said to be slow against an adequate supply position.

Hematine — Crystals of this extract moved at 47c. per pound in barrels for the No.1 grade, and No. 2 at 43c. Other grades from No. 3 to No. 5 ranged downward at a 2c differential between grades. No. 1 paste was quoted at 20½c. Supplies were said to be adequate, but demand for this item, as with most tanning materials, was off currently from levels of the previous two months. Expectation was that demand would improve in the coming weeks.

Hypernic—Trading was slow in view of light demand. No. 2 crystals were firm at 52c. per pound. No. 1 liquid was quoted at 35c. per pound, and No. 2 liquid at 27c.

Quebracho—Demand for this extract was reported as still quiet, but with indications of increased buying interest which led dealers to feel that the next few weeks would see an upturn in business. Meanwhile, there was no change in price structures which have prevailed recently.

Sumac—Leaves of 28 percent tannin were quoted at $117 per ton, ex dock, in bags. Demand was low and trading very light.

Tannic Acid—Technical acid in drums was priced at 95c. per pound, unchanged from the steady position this item has held over recent months. Demand was well sustained at moderate levels against readily available supplies.

Wattle Bark—Prices were unchanged from former levels on all grades. Trading was said to be quiet, and limited to shipments for only immediate needs. Dealers were inclined to feel that the market would soon show some pick up in view of somewhat better inquiry for replacement material.

For Late Market Developments, See Page 4

Mutual Bichromates

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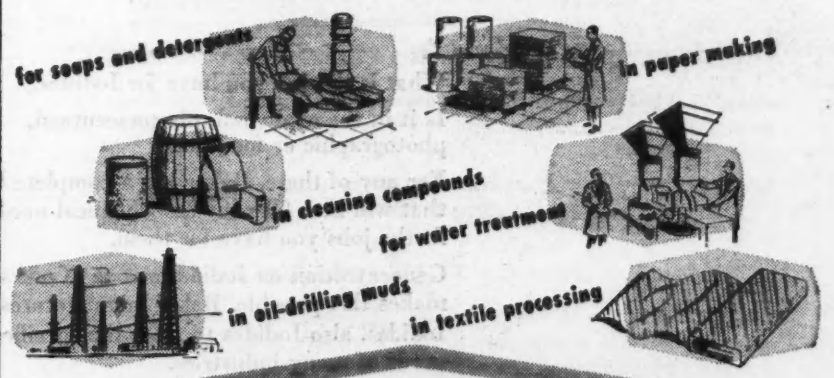

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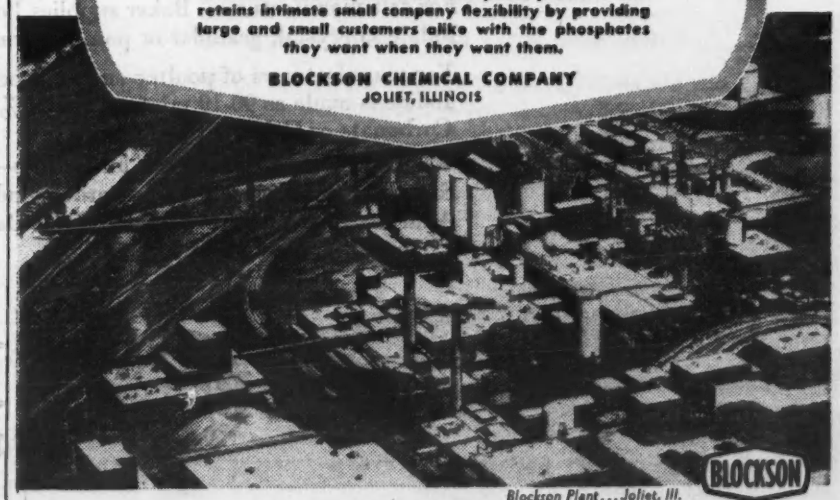

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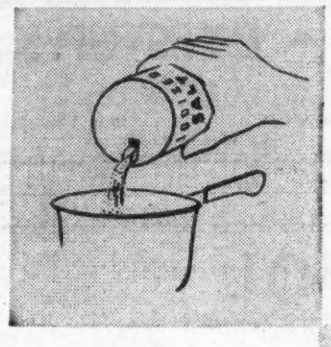

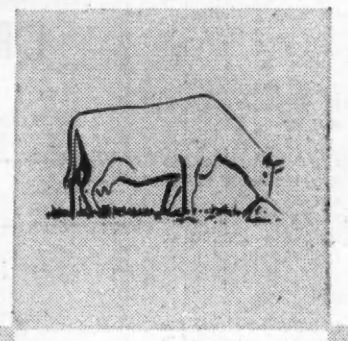

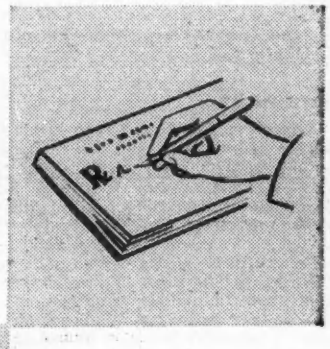

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REAGENT FINE INDUSTRIAL

Drugs and Fine Chemicals

Producers reduced domestic caffeine price schedules 15c. per pound last week. The move was ascribed to the current competitive situation. This latest reduction was one of several which have taken place in the past two years or more. It was generally felt that the reduction, as in the case of previous ones, was made in order to bring domestic caffeine prices more into line with those quoted for imported material. The meteoric rise of west Germany as a producer of pharmaceuticals and chemicals has been a source of concern to American manufacturers of competitive items. Pricewise, imported caffeine has been underselling the domestic. Some manufacturers here, however, claim that sales have been holding their own in view of the price advantage of the imported. It was said that physical qualities, such as color and odor, were all important to some pharmaceutical manufacturers using caffeine. Other related compounds remained unchanged in price last week. Generally speaking, a reduction in caffeine is followed by price cuts in aminophylline and theophylline. Demand for these compounds has been reportedly poor, in any event.

Consumer demand for some compounds was apparently moving at a good volume in spite of the gloom encountered in certain quarters. Citric acid was moving very well, producers report. The outlook for the next few months was for a continued heavy demand for this item, it was said. Ascorbic acid was reportedly in good demand. Increasing quantities of this vitamin were going into food uses, such as frozen food processing, where it is used as an antioxidant. In addition, pharmaceutical manufacturers have been using large quantities of ascorbic acid in their vitamin formulations, it was further noted.

Tartaric acid was in generally fair demand. Some producers appeared to be doing better than others in meeting the competition of lower priced imports. Again there was the claim of a superiority of the domestic acid over the imported. Generally, imported tartaric acid was selling considerably below that manufactured here and consumption has been a considerable portion of that overall, it was said.

Alcohol continued in generally good demand. It was anticipated that competition among producers of synthetic alcohol would be keener this year while the amount produced by the fermentation process will be smaller, percentagewise, at any rate. Prices were firm.

Acetanilide — Demand for USP grade acetanilide was reportedly moving at routine levels. Supplies were ample for current inquiry and prices were unchanged.

The Tariff Commission reported that Production of technical and USP grades of acetanilide aggregated 353,252 pounds in October last year. Figures for November were not given in the most recent report of the commission.

Acetylsalicylic Acid — The market was steady on this compound. Supplies were adequate for current needs and expected to continue. Prices were unchanged.

The Tariff Commission reported that production of acetylsalicylic acid amounted to 1,056,031 pounds in November last year compared to 1,298,484 pounds during October.

Agar—Spot supplies of agar have grown very tight. The immediate outlook for this item was for a continuing shortage in months to come. The new crop was not expected to become available for some time.

An important factor in the current short supply situation was the destruction, late last year, of sizable stocks in a warehouse fire in Japan. As a result supplies were seriously depleted with no chance of replacement until this year's production comes in, it was said.

Spot prices on agar were current at $3.50 per pound for the Kobe No. 1 strip with powdered, 30 mesh, at $3.85.

Alcohol—Demand for industrial alcohol was reported to be moving at generally good levels. Supplies were adequate for current needs and prices continued unchanged.

With synthetic alcohol production capacity increased some 20 percent by the coming on stream last November of a new facility capable of turning out 125,000 proof gallons daily, there seemed to be little doubt that the industry could meet virtually any demand placed upon it short of the exigencies of a hot war. Competition between synthetic and fermentation producers was expected to be less of a factor in the market as competition among synthetic producers this year, some sources averred.

With consumption of blackstrap molasses tending to lessen as a result of a decline in consumption of prepared stockfoods, there was anticipation that molasses prices would show greater dependence on the needs of fermentation alcohol producers this year. To date, alcohol prices remain unchanged but there may be some price action if demand should slacken, it was noted.

Comparative statistics on wine production were released last week by the Treasury Department. Production of still wines aggregated 20,755,486 wine gallons in November compared to 64,846,832 gallons during the preceding month and 25,740,030 gallons during the corresponding month in 1952.

Total tax-paid withdrawals amounted to 12,440,427 pounds in November, 1953, compared to 12,819,004 gallons in October and 12,342,527 gallons in the corresponding month in 1952.

Stocks of still wines totaled 214,956,204 gallons in November last year, compared to 206,868,326 pounds in October and 233,599,556 gallons at the end of November, 1952.

Ascorbic Acid — Demand for ascorbic acid was reported to be running at good levels. Increasing use of this vitamin in pharmaceutical manufacturing as well as in food processing industries was said to be a major factor in the step up in consumption. Supplies were adequate for requirements and expected to continue. Prices were unchanged.

The Tariff Commission reported that production of ascorbic acid totaled 178,772 pounds in November compared to 165,361 pounds in October last year.

Caffeine—Price schedules were reduced 15c. per pound on domestic caffeine last week. The price reduction was one of several made in this item over the past two years and was attributed to current competitive conditions. A major bugaboo to domestic producers has been the competition of lower priced caffeine from abroad, principally west Germany, which has a fabulous recovery in the chemical and drug fields. Some domestic producers have been reportedly about holding their own with the important despite the considerable price advantage enjoyed by the latter. There have been claims made as to the quality of the domestic being superior to imported caffeine. Color and odor imperfections in caffeine would make it impossible for some manufacturers to use such material in their formulations, it was pointed out.

The current schedule on caffeine was as follows: crystals, $2.65 per pound; anhydrous caffeine, $2.85.

Castor Oil—Imports of castor beans and castor oil at New York and Philadelphia were as follows:—

	Pounds	
	Beans	Oil
Last week	1,842,000	590,000
Previous week	2,031,000	.....
Corresponding week, 1953	11,267,850	2,254,000
Total this year	14,263,200	1,840,000
Corresponding period, 1953	22,026,700	8,529,400

Hesperidin Methylchalcone — Demand for this compound was small but steady. There is some consumption at present in the pharmaceutical field and research was being done on additional uses, it was said. Supplies were ample for current requirements and expected to continue in the future. The current quotation was $50 per pound.

Milk Powder—Terminal markets in nonfat dry milk solids were barely steady. Offerings were relatively heavy and commercial demand was light. Offerings to the CCC on the dairy support program continued heavy. Purchases by the CCC amounted to 12,374,936 pounds at 16c. of spray process powder and 1,115,515 pounds of roller process at 14c. Total purchases since April 1, 1953, amounted to 382,756,-

For Late Market Developments, See Page 4

Price Trends

Advanced

None

Reduced

Caffeine, USP, 15c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
88.28	88.28	88.35	91.73

(*For Current Prices see page 9*)

ANSWERS TO YOUR QUESTIONS ABOUT ROCHE THIAMINE

Q. *What are the Roche thiamine products?*

A. There are two: Roche thiamine hydrochloride and Roche thiamine mononitrate. Both exceed minimum U.S.P. specifications.

Q. *For what kinds of products is Roche thiamine hydrochloride, Regular Type, intended?*

A. It is ideally suited for oral products, such as tablets, capsules, dry and liquid nutritive supplements and multivitamin preparations.

Q. *When should Roche thiamine mononitrate be used?*

A. When unusual stability problems occur in dry cereal or pharmaceutical products which are exposed to high humidity conditions in storage. It also may have advantages in certain pharmaceutical products where the pH range is above the safe level for the hydrochloride.

Q. *What about Roche thiamine hydrochloride, Ampul Type?*

A. This original Roche development is specially prepared for use in manufacturing parenteral solutions.

Q. *Can I be sure of a steady supply of Roche thiamine products?*

A. You can. Roche thiamine, always of superb quality, is made by the tons. Roche specializes in the development of vitamins and their manufacture, so you can be assured of a steady supply.

Q. *How are the Roche thiamine products packed?*

A. Roche thiamine hydrochloride, Regular Type, is packed in polyethylene bags in 1 to 25 Kg. drums. Smaller quantities in amber, screw cap bottles.

The Ampul Type is sealed under inert gas in wide mouth, screw cap bottles by the Roche G.I.G. (Gassed in Glass) process.

Q. *Why should I buy Roche vitamins?*

A. Because Roche's scientific production control assures you of uniformly highest quality. Because Roche, pioneer in vitamins by the tons, can meet your need for *any* quantity. Because Roche's research laboratories, both in the United States and abroad, are constantly working to bring you the very latest in vitamin development. Because Roche's representatives and technical personnel are always ready to work with you on solutions to your vitamin compounding and packaging problems. Because Roche has vitamin *know-how*.

Q. *What other vitamins can I get from Roche?*

A. Here is the list: various forms of vitamin A acetate and vitamin A palmitate. Ascorbic acid and sodium ascorbate. Riboflavin. Biotin. Niacin and niacinamide. Pyridoxine hydrochloride. *dl*-alpha-Tocopherol, unesterified and acetate.

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236 pounds of spray powder and 81,640,596 pounds of roller powder.

The market in dry whole milk was barely steady to weak. Offerings were adequate while buying was light.

It was recently reported that loans and inventories of the Commodity Credit Corporation on November 30, amounted to over $5,200,000,000. Included in the December 1 inventory were more than 1,069,000,000 pounds of dairy products valued at nearly $382,000,000.

Stocks of butter were—292,500,000 pounds, costing $196,000,000; cheese—271,000,000 pounds, costing $109,000,000; and dried milk—458,000,000 pounds, costing $75,000,000.

Molasses—Prices for feed molasses were generally unchanged during the week ended January 26, 1954. East and west coast prices continued a steady trend while prices in the Gulf area showed some weakness. The blackstrap price at New Orleans remained at 10½-11c. per gallon, with most reports placing it at the 10½c. level. Demand at that terminal was reported to be off from the preceding week and was currently slow to moderate. Cane blackstrap demand at other points remained about unchanged. Houston reported demand as moderate while Mobile, Savannah, Jacksonville and Clewiston reported demand as good. Supplies were adequate at most points with the exception of Savannah where they were limited.

The demand for citrus molasses has lessened at several Florida points while beet and hydrol market conditions remained the same as in the preceding week. Mexico will have available for export in 1954 approximately 29,000,000 gallons of molasses according to the Mexican Ministry of Economy. This figure includes molasses used to produce exportable alcohol. Expected production of Mexican blackstrap molasses during 1954 was estimated to be approximately 66,000,000 gallons. This compares with the 62,500,000 gallons produced in 1953.

Pectin—Demand for domestic citrous pectin was reported to be only fair. Competition of lower priced imported material was reportedly causing a good deal of concern here. Domestic NF grade pectin was priced at $2.05 to $2.06 per pound while technical grade was offered at $1.50. Imported, Danish citrous pectin was currently quoted at $1.28 per pound. Supplies of both domestic and imported were reportedly ample to meet consumer needs. Consumption, meanwhile, was generally routine on the overall.

Theobromine—The downward trend of imported theobromine prices appeared to have been arrested, some trade sources recently reported. Prices have turned much firmer with Dutch producers sold out until March or April this year. Other sources, even though higher priced, have been called upon heavily. Prices were said to be firmer as a result of increased ocean freight rates, discontinuance of the dollar premium program in Holland and heavy demand. Large orders were reported to be moving at about $2.65 while smaller parcels moved well above that level.

Domestic price schedules continued firm and unchanged with theobromine alkaloid priced at $3 per pound. Theobromine and sodium acetate was pegged at $3.55 to $3.60 while the salicylate was offered at $4. Theobromine sodio-salicylate was quoted at $2.90 per pound.

Consulting Chemists Ass'n Offers Reprints of 'Consulting Services'

The Association of Consulting Chemists & Chemical Engineers, Inc., has published reprints of the 1953 anniversary edition of "Consulting Services". Copies may be obtained from the association at 50 East 41st street, New York 17. The price is $1.00 per copy.

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Lilly Biochemical Executive

Dr. Cornelius W. Pettinga, a member of the research staff of Eli Lilly & Co., Indianapolis, Ind., for four years, has been named head of the firm's biochemical research department. Employed as a chemist in 1949, Dr. Pettinga spent the first year of his Lilly association with the Argonne National Laboratory in Chicago. Since March, 1953, he has been a member of the biochemical research department.

Com'l Solvents Strengthens Ethyl Alcohol Sales Position

In an interview last week with W. Ward Jackson, general manager of industrial chemicals department, Commercial Solvents Corporation, New York, Mr. Jackson outlined the strengthened position of CSC's industrial ethyl alcohol sales by virtue of the recent long-term contractual arrangement with a source of synthetic ethyl alcohol from natural gas.

Mr. Jackson stated further that this contract with National Petro-Chemicals Corporation at Tuscola, Ill., strengthens CSC's sales position by making it possible now to offer both synthetic and fermentation-base ethyl alcohol to industry.

This dual supply position in ethyl alcohol will be supplemented by further strengthening of distribution points, making available to industry both types of alcohol for all purposes in tankcars, tank trucks, compartment cars and drums.

Fisher Starts Chemical Facility in New Jersey

Fisher Chemical Division of Fisher Scientific Company, Pittsburgh, Pa., has begun work on a new plant on a nine-acre plot in Fair Lawn Industrial Park, N. J. The plant is to be completed in the fall of this year. Two buildings will be devoted to manufacturing, laboratory analysis and packaging, while a third building will house a research section for the development of new chemicals and new chemical sources. Approximately 60,000 square feet will be devoted to stocks.

Mallinckrodt Elects Director

.. Two new directors have been elected to the board of Mallinckrodt Chemical Works, St. Louis, Mo. They are David R. Calhoun, jr., president, St. Louis Union Trust Company, St. Louis, and John M. Meyer, jr., vice-president, J. P. Morgan & Co., New York. Both the companies with which these new directors are associated have had close business connections over a long period of years with Mallinckrodt. The following directors were also re-elected at the meeting:—Chairman, Edward Mallinckrodt, jr., Charlton MacVeagh, Joseph Fistere, H. V. Farr, J. R. Ruhoff, V. H. Wallingford and A. H. Homeyer.

Walker Adds Fermentation Unit For Output of Feed Supplements

Hiram Walker & Sons, Inc., Peoria, Ill., has added a stillage fermentation unit to its distillery, which will increase by some 300 percent the company's capacity for producing vitamin-like concentrates used to improve livestock rations, according to a report from the company. The basic material is spent mash from the stills, a residue which until some years ago was disposed of as waste.

Trade Briefs

Eli Lilly & Co., Indianapolis, Ind., has promoted Dr. Henry M. Lee to research associate.

McGuire & Co., Oakland, Calif., has added a complete custom aerosol packaging service.

Bio-Ramo Drug Company Posts to Hershner, Cole

Bio-Ramo Drug Company, Baltimore, Md., has appointed John Franklin Hershner vice-president in charge of sales and new product development and has made Dr. Berwin Abbey Cole head of a new department of pharmaceutical research.

Mr. Hershner until recently was president of Od Peacock Sultan Company, St. Louis, Mo. Dr. Cole was formerly with the Food and Drug Administration.

Antibiotics Sought by Israel

The supply mission of the Israeli government has invited bids for supplying quantities of "Aureomycin" and "Terramycin" for which financing has been approved by the Foreign Operations Administration by the issuance of procurement authorization No. 71-00-4206. The bids should be submitted by February 8 to the government of Israel supply mission, 250 West 57th street, New York 18, attention M. M. Segal. The invitation is for 2,000 ampuls of aureomycin hydrochloride, 2,000 tubes of "Aureomycin" ointment, 6,000 "Aureomycin" capsuls and 10,000 "Terramycin" capsuls.

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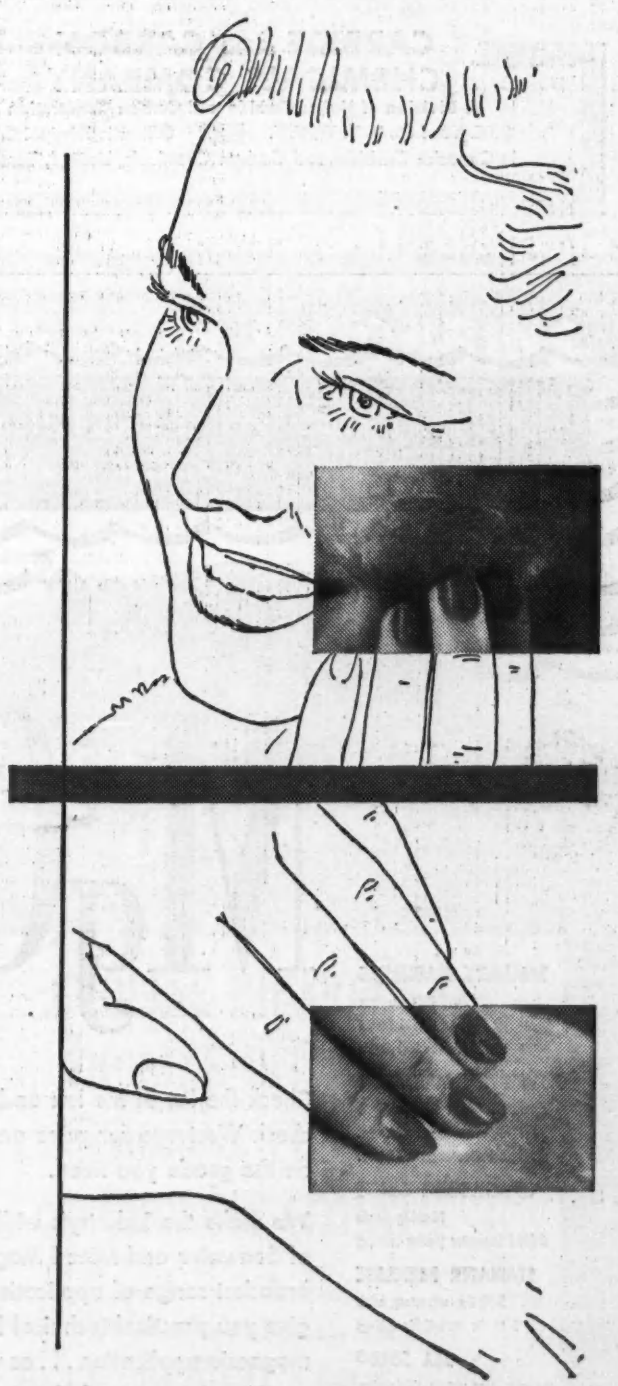

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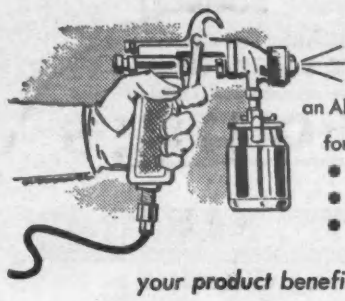

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Soap Association Told of Glycerin Supply

—Continued from page 7

oils," he continued, "is at or above prewar per capita levels, although distribution patterns have changed considerably. Most of the apparent world surplus is now held by the CCC in the form of cottonseed oil and linseed oil. In addition, substantial quantities of 1953 crop flaxseed and soybeans are covered by CCC loans and purchase agreements."

Tallow, Grease Output in 1954

Mr. Prichard estimated that US tallow and grease output this year will about equal the 2,600,000,000 pounds turned out in 1953 "because the total slaughter of cattle and hogs is estimated to remain about the same." He added that we can look for production continuing at high levels for the next few years.

The rapid inroads made by synthetic detergents, coupled with the expanded output of tallow and grease, have made available large quantities of tallow and grease for export, he pointed out, adding that these exports are likely to continue at about the high levels of last year.

A major shift in the end-use pattern for tallow and grease is now in the making, Dr. J. E. Magoffin of Eastman Chemical Products, Inc., Kingsport, Tenn., reported. He pointed to the increasingly wide use made of tallow and grease by the animal and poultry feed industry.

Dr. Magoffin said that, historically, the biggest market for fats has been the soap industry. Second ranking outlet, he went on, has been fat splitting, which, he pointed out, "is very closely allied to the production of soap and glycerin." The two industries together account for better than two-thirds of the consumption of tallow and grease in this country, he said.

Displacement of Fat-Splitting

With the growing use of fats in animal feed, the speaker contended, a new cycle is likely to be put into operation in our system of agriculture. While this is conditioned upon other factors—notably price—such an upheaval could result in the displacement of fat-splitting as the second biggest outlet for tallow and grease by the animal feed market.

"The primary basis for using tallow and grease in feeds," Dr. Magoffin explained, "lies in the caloric value of these fatty materials in the feeds." He went on to point out that fats have two and a half times the caloric energy of corn. Thus, he argued, "grease at 7½c. a pound is equivalent to corn at 3c. per pound or $1.80 per bushel," making it an economical way to provide caloric energy to feeds.

In addition, he said, the use of fats in feeds has another great advantage. This is the control of dustiness that the addition of fats to feeds provides," he said. "The dust problem in feed mills, in transportation and at the user's establishment has always been an annoying and troublesome one. The addition of as little as 1 percent fat to feed completely eliminates the dust problem."

Feeds Demand Cited

For this and other reasons, Dr. Magoffin continued, a definite demand for fats to be added to animal and poultry feeds has been created. "Several of the large producers of feeds in this country are already adding animal fats to all of their production," he reported. "It is my own prediction that another year will see the vast majority of formulated animal and poultry feeds fortified with animal fats."

As to the influence of this new growing outlet, one sure outgrowth, he said, will be its tendency to firm prices. "Now that the tallow and grease producer is not forced to look to export for disposal of any excess production over uses in the traditional outlets," the speaker indicated, "he will undoubtedly adopt a firmer attitude toward pricing, and there is almost certain to be less fluctuation."

John W. McCutcheon, a consultant, maintained that within the past two years there has been a "decided trend upward" in the use of fats in detergent type materials. This, he pointed out, is a sharp reversal of a pattern that had developed after 1947, when consumption of fats by detergent makers fell off drastically.

Mr. McCutcheon stated that with the possible exception of glycerol monostearates—used as edible emulsifiers—the major factor in the future growth of fats in the detergent field lies in the retail market. Present trends in that direction are upward, he pointed out. Fat usage, he said in closing, may go over 200,000,000 pounds within a few years, "particularly if tallow prices keep within a 5 to 8 cent range."

National Income Prediction

While there will probably be drops of moderate proportions in certain lines, total national income this year may hold close to the record set in 1953, Dr. O. Glenn Saxon, professor of economics at Yale University, predicted. He pointed out that the most pessimistic observers see, at the worst, a decline of 10 percent in gross national product. However, he added that the majority of economists expect at worst only a 5 percent decline,

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while the optimists look for no decline at all.

The consensus of opinion, he said, is that the Federal Reserve Index of industrial production will fall off between 10 and 15 percent in 1954 to an average of about 200, as compared with 228 in the last quarter of 1953. Consumer prices will remain relatively stable with moderate declines, he declared, adding that wholesale price trends also point downward, possibly as much as 10 percent.

Restoration of Gold Standard

Dr. Saxon also looked for the early convertibility of other currencies on the dollar and restoration of a worldwide gold monetary standard. He said he based this prediction on the following factors—

European recovery in agriculture and industry is substantially higher than in 1939—with Germany far in the lead.

End of inflationary forces, except in Japan and Argentina.

European competition for world export markets is increasing in intensity, with a resulting decrease in US exports and a rise in US imports.

Expansion of trade between the west and the Iron Curtain countries after redefinition by congress of "strategic" goods.

Election of Officers

Charles S. Campbell, president of the J. B. Williams Company, Glastonbury, Conn., was elected president of the association for 1954. Mr. Campbell succeeds George A. Wrisley, vice-president of the Allen B. Wrisley Company, Chicago, who headed the soap organization for four terms.

Elected regional vice-presidents were—East, J. J. Babb, president of Lever Brothers Company, New York; middle west, E. A. Moss, vice-president of Swift & Co., Chicago, and far west, A. K. Forthman, vice-president of the Los Angeles Soap Company, Los Angeles. Newly elected to the board of directors were Mr. Frothman and J. L. Christian, vice-president of Monsanto Chemical Company's inorganic chemicals division, St. Louis, Mo.

Trade Briefs

Dr. Roger Adams has been appointed to the board of trustees of Battelle Institute, Columbus, Ohio.

Nopco Chemical Company, Harrison, N. J., has appointed Miss Irene Dennery advertising and sales promotion manager.

National Science Foundation Announces Additional Grants

The National Science Foundation has announced 100 grants totaling about $1,045,000 for research in the biological and the physical sciences, and to support studies and conferences on science, scientific information exchange, compilation of scientific personnel information, education in the sciences, and travel of American scientists to international scientific meetings.

This is the second group of awards to be made during fiscal year 1954 by the foundation for the support of basic research and related matters. Since the beginning of the program in 1950, over 625 such awards have been made totaling about $6,012,000. Additional proposals are being evaluated by the staff of the foundation with the help of advisory panels of outstanding American scientists.

The reseach fields included are astronomy, chemistry, developmental biology, earth sciences, environmental biology, engineering sciences, mathematical sciences, molecular biology, physics, psychobiology, regulatory biology, and systematic biology. The duration of research grants in this group ranges from one year to five years. The research grants were approved by the National Science Board upon the recommendation of Dr. Alan T. Waterman, director the foundation.

Independent Oil Elects Cullen

Independent Oil Company, St. Louis, Mo., has elected Joseph A. Cullen vice-president. Mr. Cullen joined Independent's sales organization in 1925. He will continue in his present capacity as technical advisor in the solvent department.

Ethyl Alcohol Technical Data Sheet Published by Commercial Solvents

Commercial Solvents Corporation, New York, has issued a technical data sheet on its grades of ethyl alcohol. Information contained in the leaflet covers such aspects as specifications, physical properties, grades and types, toxicity, shipping, handling and storage. Copies of the bulletin, No. 21, may be obtained by writing to the company at 260 Madison avenue, New York 16.

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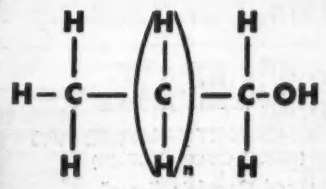

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Randall Report Dissenters Give Own Program

—*Continued from page 3*

of the economy of the company rather than against the country as a whole?" Messrs. Reed and Simpson asked.

"We have supplied the means for new plants, machinery and know-how in our programs of foreign aid," they stated, "but we did not contemplate by this action that our aid would be further extended to give away also the domestic markets of our own industries and workers to absorb this newly-created foreign capacity."

Terming "an astounding proposal" the commission's recommendation that the Federal Reserve System be authorizetd to engage in currency stabilization operations with foreign central banks, they contended that it constitutes "one of the greatest threats to which the American bank system and American bank depositors have ever been subjected."

Treatment of Labor Standards

Strongest criticism of the minority report was directed at what the authors called the "brief, non-factual and utterly inadequate treatment" of labor standards in international competition. "It is incomprehensible to us," they held, "that the commission has ignored the vital importance of wages, total labor and other costs in determination of over-all production costs and their relation to the intense international competition for our own domestic, as well as all world export, markets."

The authors of the minority report stated that they are in more or less substantial agreement in a number of the areas covered by the Randall commission majority report. These include encouragement of US investments abroad; moderate loans and grants for technical assistance; congressional study of farm policy as related to tariffs; condemnation of international commodity control schemes and agreements on raw material, and simplification of customs.

Government Subsidies Idea Scored

They emphatically agreed with fourteen other members of the commission in condemning proposed government subsidies to industries, workers and communities that are hurt by imports. In a section of the minority statement titled "Analysis and Criticism," Messrs. Reed and Simpson charged that the majority report merely expresses the individual preconceived conclusions and opinions of a majority of the commission. They declared that the report was prepared too hastily, without adequate consideration of the views of industries and others vitally concerned; that it does not meet the mandate of the congress, because it fails to coordinate foreign economic policy with the domestic economy and national security of the United States, and that it sets forth no recommendations for the handling of unemployment which admittedly would result from the adoption of its recommendations.

They added that the report does not consider the impact of its recommendations on the tax revenues of the nation, and that it is based on economic conditions abroad which have now ceased to exist.

SOCMA Statement on Report

The SOCMA statement, made by Dr. Cary R. Wagner, president of the association, pointed out that many of the basic conclusions of the majority report marked important milestones in governmental thinking.

Even without a detailed study of the report, Dr. Wagner declared, it is quite obvious that the commission rejects the free trade theory as being unworkable economic policy for the United States in today's world. Moreover, he went on, by stating squarely that the United States is not a high tariff country, the report dispells the contention by foreigners and free traders that United States tariffs are a barrier to world trade.

Dr. Wagner commented favorably on the report's firm statement that the best interest of the country requires the prosperous existence of all types of industries. "This gives the lie," he said, "to those who have urged the nation's business to shift to mass production industries, leaving businesses whose products call for high labor costs to die on the vine."

The report's greatest single disappointment in Dr. Wagner's opinion was its failure even to mention the necessity for providing adequate protection for industries which are essential to national defense. However, he added, he was confident that the thinking of many of the congressional members of the commission would prevail on this point. Dr. Wagner said that the improved prosperity and the healthy state of the free nations of the world, commented upon in the Reed-Simpson report eliminate the need for hasty action by congress on the commission's recommendation regarding tariff and trade agreement authority.

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HIF Releases National Data On Medical Services Study

The Health Information Foundation has made public data revealed in a national consumer survey on medical costs. The investigation, the first of its kind in twenty years, according to the foundation, was sponsored by the drug industry as a public service. The finding in four summary reports were made public by Kenneth Williamson, executive vice-president of the foundation.

The foundation's four reports deal with:—1. The number of persons protected by voluntary health insurance, parts of the population not protected, and other aspects of participation; 2. costs incurred by families for hospital, surgical and other medical services, and the extent to which health insurance is helping to meet costs; 3. the effects of health insurance upon the utilization of hospital, surgical and other medical services, and 4. the extent to which families are in debt due to medical expenses.

The survey facts are based on person-to-person interviews in homes, conducted last June and July for Health Information Foundation by the National Opinion Research Center of the University of Chicago, documenting the medical expenses of 8,846 individuals during the previous twelve months. Some of the important findings documented in the text and tables of the four summaries are:—

A total of 58 percent of the population, or 89,500,000 persons, now have some type of health insurance. This represents a growth of 83,900,000 in the past fifteen years, compared with a total of 5,600,000 persons who were protected in 1939. Some type of hospital insurance is held by 57 percent of the population, or 87,400,000 persons. Surgical or medical insurance in some form is held by 48 percent of the population, or 74,500,000.

Year's Bill $10,200,000,000

A total of $10,200,000,000 cost was incurred from July, 1952, through June, 1953, by families for medical and dental services and goods. Of the total gross cost, $1,500,000,000 was covered by insurance benefits.

Fifty percent of the total gross costs incurred by all persons in the nation for hospital expenses, or $1,000,000,000, was covered by insurance benefits, although only 57 percent of the population has insurance. Thirteen percent of the total physician costs, or $500,000,000, was covered by insurance benefits. Within these costs, 38 percent of the surgical fees to physicians were paid by insurance benefits.

The average cost per family for medical and dental services during the year covered, for all 50,000,000 families with and without insurance in the United States, was $205. Among 28,000,000 families with hospital insurance, 59 percent had more than 80 percent of their hospital expenses covered.

DCAT Hears Klumpp

—*Continued from page 4*

pounding prescriptions." Such ideas, he asserted, "have not been fully thought through."

Danger to Fair Trade Seen

"To adopt such a proposal through legislative enactment," Dr. Klumpp contended, "would be to kill the fair trade laws, to pave the way for grade labelling—which, I consider foreign to a free enterprise—and, ultimately and inexorably, to turn over more and more control and operation of the pharmaceutical industry to the government."

Turning to the newly-organized National Pharmaceutical Council which he heads, Dr. Klumpp stated that the council's purpose is to bring influence to bear against those practices of the few "that are undermining the ethical principles of fair competition and fair dealing upon which our industry must rest. We know that in many other realms practices come to be condoned that were once considered immoral or unethical. The public responsibility and trust of this industry is too vital and precious to permit any erosion of our ethical standards and sound trade practices."

He called upon all segments of the drug industry to support the council in its mission of sustaining industry ethics. "We are not organized to drive a wedge between pharmacy and the manufacturers," the council president emphasized. "On the contrary," he declared, "we believe that the interest of all of us will be best served by strengthening the bonds of common interest that hold us together."

Veterinary Drugs Plan

—*Continued from page 3*

his customers to the reporting requirements.

It was first proposed that the special license would be for the primary purpose of evaluating the "efficacy" of the product. Because of the great divergency of medical opinion as to the meaning of the term "efficacy" it has dropped from the regulations.

Ordinary Inspections

The regulations provided that products covered by the special licenses could be prepared and tested only under "supervision" of the agents of the department. This empowered the authorities if they so desired to require that a manufacturer refrain from all operations unless an agent was personally in attendance at all times In the new draft this has been changed to provide for ordinary inspections by agents as in the case of other health products.

The revised regulations have been drawn up by the animal disease eradication branch of the Agricultural Research Service, headed by R. J. Anderson. This is the successor agency to the old Bureau of Animal Industry, which was headed by Dr. B. T. Simms, who has been transferred out of the regulatory work and is now chief of the animal diseases and parasite research branch of ARS.

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BASIC MANUFACTURER OF INDUSTRIAL, PHARMACEUTICAL, AND AGRICULTURAL CHEMICALS

Imports at United States Ports

New York

AMMONIUM CARBONATE—20 dms, American British Chemical Supplies, Glasgow
PERSULPHATE—50 dms, Lo Curto & Funk, Bremen
AMYRIS OIL—7 dms, George Uhe Co, Miragoane
ANILINE DYES—17 dms, Hensel Bruckmann & Lorbacher, Hamburg
3 cans, Hensel Bruckmann & Lorbacher, Hamburg
27 dms, C A Haynes, Hamburg
12 dms, Sandoz Chemical Works, Hamburg
1 dm, Chemical Bank, Rotterdam
6 dms, Heemsoth Kerner, Liverpool
ANNATTO SEED—334 bgs, D Steengrafe & Co, Guayaquil
ARABIC GUM—250 bgs, National City Bank, Port Sudan
250 bgs, Irvington Trust Co, Port Sudan
51 bgs, Bank of N Y, Port Sudan
ARGOLS—220 bgs, Tartaric Raw Materials, Naples
ASCORBIC ACID—30 dms, American Roland Corp, Antwerp
BARBASCO ROOT—156 bls, Astoria Panamerican, Callao
BASIL LEAVES—79 bgs, Citrus & Allied Essential Oils Co, Palermo
BEESWAX—61 bgs, Reaud Geck Corp, Puerto Barrios
5 dms, Independent Fur Brokers, Guayaquil
35 bgs, Porcella Vicini & Co, Puerto Plata
58 bgs, D Steengrafe & Co, Santiago
35 bgs, H H Pike, Sanitago
91 blks, Wm Diehl & Co, Djibouti
40 bgs, Santiago
BENTONITE—1,667 bgs, National City Bank, Leghorn
BENZOIN GUM—16 cs, D & S Chemical Corp, Bangkok
BERGAMOT OIL—6 hf cs, Noville Essential Oil Co, Messina
40 qu cs, Fritzsche Bros, Messina
4 hf cs, Antoine Chiris Co, Messina
4 hf cs, Messina
BISMUTH—92 cs, Cerro de Pasco Corp, Callao
CADMIUM—100 cs, Mercantile Metal & Ore Corp, Antwerp
66 cs, Leviant & Co, Antwerp
24 bxs, Cerro de Pasco Corp, Callao
CAFFEINE, ANHYDROUS—32 dms, National City Bank, Rotterdam
CALCIUM CARBONATE—300 bgs, H J Baker & Bro, Avonmouth
CAMPHOR OIL—25 dms, Magnus Mabee & Reynard, Yokohama
CARAWAY SEED—100 bgs, Rotterdam
CARBON—1,200 bgs, L A Salomon, Rotterdam
ACTIVATED—125 dms, E I DuPont De Nemours & Co, Liverpool
CARDAMOMS—3 cs, Max Van Pels, Bombay
10 cs, Kellys American Limited, Bombay
25 cs, Wm E Martin, Bombay
CARNAUBA WAX—336 bgs, National City Bank, Rio de Janeiro
CAROB SEED—508 bgs, Algiers
CASEIN—1,000 bgs, F A Close & Co, Montevideo
2,000 bgs, Buenos Aires
CASHEWNUTSHELL LIQUID—96 tons, Colloid Chemical Laboratory, Cochin
CASTOR BEANS—625 bgs, Bankers Trust Co, Bahia
2,800 bgs, Spencer Kellogg, Manta
2,769 bgs, Baker Castor Oil Co, Manta
669 bgs, Chase National Bank, Manta
2,036 bgs, Grace National Bank, Bahia
1,341 bgs, Chase National Bank, Bahia
680 bgs, Grace National Bank, Manta
680 bgs, Marcel Calvet, Manta
680 bgs, Baker Castor Oil Co, Cristobal
OIL—295 tons, Baker Castor Oil Co, Rotterdam
CELERY SEED—50 bgs, Becker Mayer Seed Co, Marseille
33 bgs, Levy & Levis Co, Marseille
42 bgs, Marseille
CHESTNUT EXTRACT—990 bgs, Barkey Importing Co, Genoa
CHILLIES—200 bgs, M S Cowen, Kobe
25 bgs, Rosenthal Bercow, Kobe
100 bgs, S L Jones & Co, Kobe
156 bgs, Kellys America Ltd, Kobe
100 bgs, Wm E Martin, Kobe
CHLORPARAXYLOL—20 dms, Rotterdam
CINNAMON QUILLS—100 bls, Fuerst Bros, Colombo
50 bls, Louis Furth, Colombo
CITRONELLA OIL—15 dms, Magnus Mabee & Reynard, Colombo
CLOVES—100 bgs, R T French, Tamatave
200 bgs, Otto Gerdau, Tamatave
200 bgs, Lo Curto & Funk, Tamatave
100 bgs, Fuerst Bros, Tamatave
50 bgs, Kellys American Ltd, Tamatave
200 bgs, George Lueders & Co, Tamatave
100 bgs, Kellys American Ltd, Marseille
100 bgs, Fuerst Bros, Marseille
CLOVE OIL—28 dms, L A Champon & Co, Tamatave
CODLIVER OIL—18 crts, B Westergaard & Co, Bergen
COAL TAR DYES—10 bbls, Hensel Bruckmann & Lorbacher, Hamburg
COCONUT OIL—650 tons, Lu Do & Lu Ym Corp, Cebu
347 tons, American Trust Co, Zamboanga
396 tons, Manila
CODLIVER OIL—400 dms, Dyson Shipping Co, Reykjavik
100 dms, Peder Devold Oil Co, Reykjavik
COPAL GUM—220 bkts, Internatio Rotterdam, Macassar
158 bkts, Borneo Sumatra Trdg Co, Macassar
71 bkts, O G Innes Corp, Macassar
COPPER CYANIDE—44 dms, Marine Midland Trust Co, Antwerp
71 dms, Liverpool
COTTON LINTERS—138 bls, Williamson Northup Co, Santos
CREAM OF TARTAR—500 bbls, National City Bank, Rotterdam
CRESYLIC ACID—90 dms, W D Neuberg Co, London
CUTTLEFISH BONE—43 cs, American Cuttlefish Bone & Crucible Co, Accra
100 cs, Lisbon
100 cs, La Goulette
DAMMAR GUM—280 bgs, Internatio Rotterdam, Singapore
70 bgs, O G Innes Corp, Singapore
DEXTRIN—100 bls, Arabol Manufacturing Co, Rotterdam
DIACETONE GULOSONIC ACID—42 cs, Hoffman-La Roche Inc, Hamburg
DIHYDROSTREPTOMYCIN SULFATE — 2 ctns, Merck & Co, Luanda
DILLSEED—84 bgs, Louis Furth, Bombay
84 bgs, R T French, Bombay
EPSOM SALT—440 bgs, Interstate Chemical Corp, Bremen
FENNEL SEED—285 bgs, M J Golombeck, Bombay
FISHLIVER OIL—1 dm, Freedman & Slater, Yokohama
FUEL OIL—102,331 bbls, New England Petroleum Corp, Punta Cardon
104,000 bbls, Esso Export Corp, Aruba
131,127 bbls, Esso Export Corp, Guanta
277,167 bbls, Paragon Oil Co, Tampico
9,546 tons, Paragon Oil Co, Curacao
95,551 bbls, Paragon Oil Co, Punta Cardon
715,282 bbls, Esso Standard Oil Co, Aruba
203,766 bbls, Esso Standard Oil Co, Amuay Bay
146,947 bbls, Gulf Oil Corp, Curacao
179,150 bbls, Metropolitan Petroleum Corp, Curacao
10,000 bbls, Asiatic Petroleum Corp, Curacao
GALL—6 dms, F J Benkart, Vera Cruz
GALLNUTS—85 bgs, Lattakia
GELATIN—10 bbls, Hensel Bruckmann & Lorbacher, Rotterdam
60 bgs, Rotterdam
100 bgs, Liverpool
GHATTI GUM—34 bgs, S B Penick & Co, Bombay
200 bgs, Intra Mar Shipping Co, Bombay
GINGER ROOT—186 bgs, Karl H Landes & E Balint, Rotterdam
GLUE—100 bgs, Hudson Glue Corp, Leghorn
300 bgs, Manhattan Paste & Glue Co, Bremen
22 bgs, Jung Forwarding Co, London
BONE—300 bgs, Transatlantic Animal By-Products Corp, Rotterdam
STOCK—116 bdls, A M Goldstein, Cristobal
170 bls, Gillespie & Co, Maracaibo
GRAPHITE—500 bgs, C Pettinos, Colombo
750 bgs, Joseph Dixon Crucible Co, Colombo
250 bgs, Asbury Graphite Mills, Colombo
250 bgs, Eagle Pencil Co, Bremen
GYPSUM—17,279 tons, U S Gypsum Co, Hantsport
HENNA LEAVES—104 bgs, S B Penick & Co, Karachi
POWDER—208 bgs, S B Penick & Co, Karachi
IODINE, CRUDE—100 kgs, International Fertilizer & Chemical Corp, Yokohama
327 kgs, Antony Gibbs & Co, Tocopilla
IPECAC ROOT—10 bgs, Wessel Duval & Co, Cristobal
IRISH MOSS—20 bls, Wm M Allison & Co, Havre
IRON BLUE—11 dms, Van Oppen & Co, Liverpool
1 bbl, Van Oppen & Co, Liverpool
2 ctns, Van Oppen & Co, Liverpool
KARAYA GUM—242 bgs, Colony Import & Export Corp, Bombay
323 bgs, Morningstar Nicol, Bombay
373 bgs, S B Penick & Co, Bombay
61 bgs, Wm M Allison & Co, Bombay
307 bgs, Stein, Hall & Co, Bombay
KOLA NUTS—107 bgs, John Holt & Co, Accra
LEATHERMEAL—1,000 bgs, Liverpool
LEMON OIL—100 hf cs, Dodge & Olcott, Messina
LEMONGRASS OIL—6 dms, Felton Chemical Co, Cochin
12 dms, Wonger & Co, Cochin
LIVER POWDER—18 dms, Tec Chemical Corp, Montevideo
4 ctns, Tec Chemical Corp, Montevideo
LOCUSTBEAN GUM—75 bgs, T M Duche & Sons, Hamburg
300 bgs, Morningstar Nicol, Rotterdam
224 bgs, Morningstar Nicol, Portimao
100 bgs, Bank of N Y, Valencia
911 bgs, J L Quesada, Valencia
MACE—40 cs, Catz American Co, Macassar
MAGNESIUM CARBONATE—950 bgs, Reheis Co, Liverpool
SULPHATE—1,500 bgs, Sterling Chemical Corp, Bremen
MANGROVE BARK—1,850 bgs, Olson Sales Agency, Cristobal
EXTRACT—4,000 bgs, Saxe Cutch Corp, Sandakan
MELAMIN—18 bbls, Terra Chemicals Inc, Bremen
METACRESOL—1 dm, H A Gogarty, Liverpool
METANITROPARATOLUIDINE — 1 dm, Hensel Bruckmann & Lorbacher, Hamburg
MILK POWDER—18 crts, D L Sterling & Sons, Rotterdam
MOLASSES—4,107 tons, S Western Sugar & Molasses Co, Duran
1,402 tons, S Western Sugar & Molasses Co, Nykoebing
450 tons, W R Grace & Co, Salaverry
MONTAN WAX—380 bgs, Wax & Rosin Products, Bremen
101 bgs, Rotterdam
MYROBALANS—2,280 bgs, Hammond & Carpenter, Bombay
EXTRACT—200 bgs, River Plate Corp, Liverpool
NAPHTHALENE—1,000 bgs, Antwerp
2,667 bgs, Rotterdam
NAPHTHOL—8 dms, C A Haynes, Hamburg
NICKEL CHLORIDE—50 cks, Rotterdam
SULPHATE—40 cks, Rotterdam
NUTMEGS—63 bgs, Fuerst Bros, Macassar
OLIVE OIL—100 dms, Venice Importing Co, Piraeus
50 dms, J Ossola Co, Piraeus
50 dms, Moscahlades Bros, Piraeus
200 dms, Guaranty Trust Co, Piraeus
32 dms, Uddotaormina, Genoa
100 dms, Bank of America, Barcelona
100 dms, Barcelona
ORANGE OIL—2 dms, Citrus & Allied Essential Oils Co, Puerto Plata
PAPAIN——51 hf chts, Meer Corp, Colombo
20 cs, S B Penick & Co, Colombo
PAPRIKA—400 cs, Gallagher & Ascher, Alicante
175 bgs, Schoenfeld & Sons, Rotterdam
950 bgs, A A Sayia, Alicante
300 bgs, Gallagher & Ascher, Alicante
50 bgs, Lisbon
225 bgs, Alicante
PARSLEY SEED—84 bgs, Rotterdam
PATCHOULI OIL—11 dms, Antoine Chiris Co, Penang
10 dms, Lo Curto & Funk, Penang
2 dms, Givaudan Corp, Penang
PEATMOSS—250 bls, Premier Peatmoss Corp, Bremen
1,793 bls, Premier Peatmoss Corp, Dublin
300 bls, J E Bernard, Bremen
1,250 bls, E Dunwoody, Bremen
250 bls, Bremen
PECTIN—44 kgs, Jafbro Corp, Gothenburg
PEPPER, BLACK—140 bgs, Borneo Sumatra Trading Co, Singapore
105 bgs, Mutual Spice Co, Singapore
245 bgs, Joensson & Cross, Singapore
140 bgs, A G Dunn, Singapore
140 bgs, H Schlichting & Co, Singapore
385 bgs, A C Israel, Singapore
35 bgs, K A Export Corp, Singapore
105 bgs, Ludwig Mueller, Singapore
526 bgs, E H Simpson & Co, Singapore
35 bgs, Internatio Rotterdam, Singapore
35 bgs, J Berlage, Singapore
50 bgs, Joensson & Cross, Colombo
80 bgs, Otto Gerdau, Colombo
32 bgs, J H Schroder, Colombo
200 bgs, A G Dunn, Cochin
40 bgs, Internatio Rotterdam, Cochin
80 bgs, Otto Gerdau, Cochin
160 bgs, Ludwig Mueller, Cochin
40 bgs, A C Israel, Cochin
296 bgs, Volkart Bros, Cochin
80 bgs, J Berlage, Cochin
80 bgs, Joensson & Cross, Bombay
140 bgs, Orbis Commodity Service Corp, Singapore
210 bgs, Singapore
RED—207 bgs, Becker Mayer Seed Co, Iskenderun
PEPPERMINT LEAVES—6 cs, Herbarium, Hamburg
PETITGRAIN OIL—14 dms, Buenos Aires
PETROLEUM, CRUDE—120,000 bbls, Socony Vacuum Oil Co, Puerto La Cruz
600,000 bbls, Esso Standard Oil Co, Puerto La Cruz
105,616 bbls, Esso Standard Oil Co, Cartagena
213,112 bbls, The Texas Co, Sidon
113,571 bbls, California Oil Co, Sidon
POLLACKLIVER OIL—65 dms, Wilbur Ellis Co, Yokohma
POPPY SEED—100 bgs, Rotterdam
POTASH SALTS—50 kgs, A Gusmer, London
POTASSIUM CARBONATE—6 bbls, Oil & International Corp, Hamburg
CYANIDE—178 dms, Liverpool
PERSULPHATE—50 dms, Lo Curto & Funk, Bremen
PSYLLIUM SEED—160 bgs, S B Penick & Co, Bombay
121 bgs, T M Duche & Sons, Bombay
5 bgs, S B Penick & Co, Marseille
PYRETHRUM FLOWERS—155 bls, Gulf Oil Corp, Kobe
QUEBRACHO EXTRACT—1,025 bgs, Buenos Aires
QUICKSILVER—200 flks, Chase National Bank, Tampico
17 flks, G Jimenez Corp, Tampico
138 flks, G Jimenez Corp, Vera Cruz
RED EARTH—1,568 bgs, Smith Chemical & Color Co, Avonmouth
SAGE LEAVES—66 bls, Herbarium, Hamburg
325 bls, Louis Furth, Hamburg
SAGO FLOUR—544 bgs, Stein, Hall & Co, Singapore
SAPONIN—10 cs, Liverpool
SEEDLAC—524 bgs, East Asiatic Co, Bangkok
169 bgs, Commercial Alcohols Ltd, Bangkok
125 bgs, J S Chawla, Bangkok
500 bgs, Ralli Bros, Bangkok
250 bgs, Gillespie-Rogers-Pyatt, Bangkok
167 bgs, Capital Shellac Corp, Bangkok
325 bgs, Bangkok
SENNA LEAVES—55 bls, Irving Trust Co, Port Sudan
SESAME SEED—250 bgs, Louis Furth, Cristobal
246 bgs, Puerto Barrios
1,000 bgs, Chase National Bank, Puerto Barrios
60 bgs, Norwalk Mills, Lattakia
375 bgs, Chase National Bank, Piraeus
SHELLAC—67 cs, F H Paul & Stein Bros, Rotterdam
43 bgs F H Paul & Stein Bros, Hamburg
100 bgs, Colony Import & Export Corp, Bangkok
SILICON CARBIDE—5 cks, D C Andrews, Oslo
SOAPSTOCK—2 dms, Bunge Corp, Callao
SODA LIME—25 dms, Neptune Forwarding Co, Oslo
SODIUM ALGINATE—2 ctns, Croda Inc, Oslo
CARBONATE MONOHYDRATE—100 bgs, Liverpool
SULPHATE ANHYDROUS—3,000 bgs, Rotterdam
SQUILL—250 bgs, S B Penick & Co, Palermo
TANNING EXTRACT—375 bgs, Gallagher & Ascher, Marseilles
TAPIOCA—63 bgs, Biddle Purchasing Co, Tjirebon
FLOUR—525 bgs, Manhattan Paste & Glue Co, Bangkok
500 bgs, Internatio Rotterdam, Bangkok
2,500 bgs, Internatio Rotterdam, Singapore
545 bgs, Stein Hall & Co, Tjirebon
TARA POWDER—414 bgs, Callao
THEOBROMINE—4 cks, European Chemical Co, London
TRAGACANTH GUM—15 bgs, T M Duche & Sons, Khorramshahr
44 cs, V Simidian & Co, Khorramshahr
226 bgs, Sovereign Intern Corp, Khorramshahr
TRICHLOROETHYLENE—51 dms, E R Zorgniotti, Genoa
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Liverpool
VANILLA BEANS—21 cs, Irving Trust Co, Antalaha
43 cs, First National Boston, Antalaha
67 cs, J Manheimer, Antalaha
20 cs, Lo Curto & Funk, Semarang
VEGETABLE WAX—47 cs, Strohmeyer & Arpe, London
50 cs, Wm Diehl & Co, Kobe
VETIVER OIL—1 dm, L A Champon & Co, Port au Prince
WHITING—500 bgs, Pluess Staufer, Antwerp
WOOL GREASE—40 dms, Interocean Chemical & Minerals Corp, Rotterdam
52 dms, Bank of N Y, Adelaide
XYLENOL—1 crt, Fairmount Chemical Co, Bremen
ZINC CYANIDE—53 dms, Liverpool
OXIDE—6 bgs, American Firstoline Corp, Liverpool
UNDECYLENATE—2 kgs, Liverpool
ZIRCONIUM CARBONATE—34 bbls, Melberk Inc, Liverpool

Baltimore

GLYCERIN—108 tons, Lever Bros, Manila
QUEBRACHO EXTRACT—1,424 bgs, Manufacturers Trust Co, Buenos Aires

Boston

CASEIN—200 bgs, National City Bank, Buenos Aires
COTTON LINTERS—141 bls, Williamson Northup Co, Santos
OLIVE OIL—25 dms, National Shawmut Bank, Seville
QUEBRACHO EXTRACT—3,181 bgs, First National Boston, Buenos Aires
1,016 bgs, Manufacturers Trust Co, Buenos Aires
512 bgs, Buenos Aires
SEEDLAC—200 bgs, Tradesmans Bank, Bangkok
TAPIOCA FLOUR—250 bgs, Stein Hall & Co, Tandjong Priok
TRICHLOROETHYLENE—50 dms, Bendix Chemical Corp, Genoa

Houston

CINNAMON QUILLS—65 bls, Volkart Bros, Colombo

Los Angeles

BONEMEAL—3,857 bgs, Wessel Duval & Co, Antwerp
2,222 bgs, Trans-Atlantic Animal By-Products Co, Genoa
CUMIN SEED—294 bgs, D Hecht & Co, Rotterdam
COPRA—500 long tons, American Trust Co, Siain
893 long tons, Procter & Gamble Trading Co, Cebu
CAKE—4,600 bgs, Balfour Guthrie & Co, Cebu
4,480 bgs, Wilbur Ellis Co, Manila
4,480 bgs, Atkins Kroll & Co, Zamboanga
FISHLIVER OIL—125 dms, Universal Foreign Service, Yokohama
LOCUSTBEAN GUM—100 bgs, Hathaway Allied Products Co, Genoa
POLLACKLIVER OIL—100 dms, Van Camp Sea Food Co, Yokohama
50 dms, Frank P Dow & Co, Yokohama
VANILA BEANS—45 csks, Wm Clarke Co, Marseilles
WHITING—1,600 bgs, Antwerp

Norfolk

COCOA SHELLS—2,667 bgs, London
PARACHLOROMETACRESOL—150 kgs, Tennessee Eastman Co, London
QUEBRACHO EXTRACT—1,525 bgs, Manufacturers Trust Co, Buenos Aires
510 bgs, Buenos Aires

Philadelphia

BEET PULP—5,608 bgs, Rotterdam
EARTH COLOR—450 bgs, Bremen
PAINT—453 bgs, C K Williams Co, Larnaca
FUEL OIL—84,915 bbls, Socony Vacuum Oil Co, Curacao
76,363 bbls, Paragon Oil Co, Tampico
GYPSUM—6,849 tons, U S Gypsum Co, Hantsport
PEATMOSS—1,200 bgs, Rotterdam
PETROLEUM, CRUDE—254,259 bbls, Atlantic Refining Co, Pamatacual
204,328 bbls, Atlantic Refining Co, Mena Al Ahmadi
120,000 bbls, Atlantic Refining Co, Puerto La Cruz
PETROLEUM, CRUDE—111,401 bbls., The Texas Co, Las Piedras
114,707 bbls, The Texas Co, Covenas
193,839 bbls, The Texas Co, Sidon
386,853 bbls, Gulf Oil Corp, Puerto La Cruz
102,201 bbls, Gulf Oil Corp, Las Piedras
314,377 bbls, Gulf Oil Corp, Mena Al Ahmadi
201,610 bbls, Gulf Oil Corp, Banias
567,431 bbls, Socony Vacuum Oil Co, Mena Al Ahmadi
QUEBRACHO EXTRACT—2,000 bgs, Mercantile Trust Co, Buenos Aires
RAPESEED—330 bgs, Catz American Co, Rotterdam
SHELLAC—100 bgs, Calcutta
UREA—500 bgs, Nylos Trading Co, Genoa
VANILLA BEANS—110 cs, Comax Co, Tampico
WHITING—3,200 bgs, Antwerp

San Francisco

CALCIUM NITRATE—10,000 bgs, Wilson & George Meyer & Co, Heroya
CASEIN—500 bgs, J R Sheliacy, Sydney
CELERYSEED—34 bgs, Atkins Kroll & Co, Bombay
69 bgs, D Hecht & Co, Bombay
COPRA—500 tons, Cargill Inc, Legaspi
400 tons, American Trust Co, Cebu
1,100 tons, Cargill Inc, Cebu
500 tons, Cargill Inc, Siain
CAKE—4,000 bgs, Pacific Vegetable Oil Corp, Cebu
2,240 bgs, Balfour Guthrie, Manila
7,200 bgs, Balfour Guthrie, Cebu
2,000 bgs, Internatio Rotterdam, Cebu
CREOSOTE OIL—740 tons, Bernuth Lembcke Co, Amsterdam
FENNEL SEED—36 bgs, H M Newhall & Co, Bombay
FISHLIVER OIL—5 dms, Ovimpex Inc, Yokohama
2 dms, Interocean Chemical & Minerals Corp, Yokohama
FISHMEAL—1,037 bgs, Wilbur Ellis Co, Chimbote
NUTMEGS—50 bgs, D Hecht & Co, Port of Spain
35 bgs, Wheeler & Miller, Port of Spain
PEATMOSS—500 bls, Lastreto Phillips, Bremen
PEPPER, BLACK—35 bgs, Internatio Rotterdam, Singapore
PETROLEUM, CRUDE—22,207 tons, Standard Oil Co, Sungai Pakning
SESAME SEED—1,000 bgs, Pacific Vegetable Oil Corp, San Jose
SHARKLIVER OIL—100 dms, Wheeler & Miller, Otaru
TAPIOCA FLOUR—200 bgs, H R Dolan, Bangkok
250 bgs, American Key Products, Bangkok
UREA—6,170 bgs, Atkins Kroll & Co, Antwerp
1,960 bgs, Wilson & Geo Meyer & Co, Heroya
VANILLA BEANS—6 tins, Papeete

Obituaries

Charles Almy

Charles Almy, co-founder of Dewey & Almy Chemical Company, Cambridge, Mass., died January 25 in Boston. He was sixty-five years old. Mr. Almy, who retired last year, had been a consultant with Dewey & Almy for the past five years, following his resignation as executive vice-president in 1948. In 1919 Mr. Almy, with Bradley Dewey, formed Dewey & Almy to serve the can making industry. He was a director and member of the executive committee of the corporation.

Andrew S. Barada

Andrew S. Barada, one of the founders of Barada & Page, Inc., Kansas City, Mo., died January 23 in Lee's Summit, Mo. He was seventy-seven years old. Mr. Barada joined George S. Page in 1920 to form Barada & Page. Prior to that time, Mr. Barada had acquired the chemical brokerage business of O. A. Brown. He continued this business under his own name until 1920.

Lawson H. Bauer, chief chemist and mineralogist for New Jersey Zinc Company, New York, died January 27 in Franklin, N. J. He was sixty-five years old.

Charles Berlow, a consulting chemist associated with Berlow & Schlosser Company, Providence, R. I., died January 13 in that city. He was fifty-six years old.

Sir John Traill Gargill, a former chairman of Burmah Oil Company and Anglo-Iranian Oil Company, died January 24 in Edinburg. He was eighty-seven years old.

Clarence Graham, retired auditor for Standard Oil Company of New Jersey, died January 26 in Montclair, N.J. He was eighty years old.

Howard C. Krumweide, personnel director of E. R. Squibb & Sons Division of Mathieson Chemical Corporation, died January 26 in Highland Park, N. J. He was sixty-two years old.

James M. McDonald, president of St. Louis Pest Control Association, St. Louis, Mo., died January 18 in that city. Mr. McDonald was also associated with the Shaw Service Company, St. Louis, Mo.

Dr. Henry F. Moore, a physician who recently had been in charge of cortisone research in Ireland, died January 25 in Dublin, Ireland. He was sixty-six years old.

George B. Rittenhouse, a former member of the processing division of Esso Standard Oil Company at Linden, N.J., died in that city January 27. He was seventy-three years old.

Jacques P. Wolf, founder and president of Jacques Wolf & Co., Passaic, N. J., died January 26 in Monclair, N. J. He was eighty years old.

Borden Award Is Going To Donald V. Josephson

Dr. Donald V. Josephson of Pennsylvania State University, an authority on the chemistry of milk and milk products, will receive the $1,000 Borden Award n the Chemistry of Milk in Kansas City, Mo., March 27, it has been announced by Prof. Harry L. Fisher, president of the American Chemical Society, which administers the award.

The presentation will take place at a general meeting in the Muehlebach hotel during the society's 125th national meeting. Dr. Josephson, who is head of the department of dairy husbandry at Penn State, has made investigations in improving the flavor of milk products. His research has made possible several fundamental advances in dairy chemistry and practical improvements in dairy manufacturing. He has also developed methods of evaluating flavor for the Quartermaster Food and Container Institute and the American Dry Milk Institute.

The Borden Award, which consists of the cash prize and a gold medal, is sponsored by The Borden Company Foundation,, Inc., and is given annually to "recorganize and encourage outstanding research achievements in the chemistry of milk in the United States and Canada.

HEW Post to Foristel

Oveta Culp Hobby, Secretary of Health, Education, and Welfare, last week announced the appointment of James W. Foristel as the department's associate general counsel, succeeding Robert C. Ayers. Mr. Foristel had been legal advisor for the Washington office of the American Medical Association since 1949. Mr. Ayers has been appointed regional attorney for the department's regional office in Denver, Co!.

Prior to his association with the AMA, Mr. Foristel was administrative assistant to Walter C. Ploeser, a former member of congress from Missouri and executive director of the house of representative's committee on small business.

Esso Labs Appoints Two

The appointments of Wilfred O. Taff and Neil V. Hakala as assistant directors in the Esso Laboratories has been announced today by Standard Oil Development Company, central research and engineering affiliate of Standard Oil Company (New Jersey).

Mr. Taff, in his new capacity, will be responsible for research and development on new fuels processes in the laboratories' process division. Dr. Hakala, who is in the company's research division, will be responsible for research on automotive fuel quality and combustion problems on automotive engines.

Conn. Chemical Research Building Factory in England

Connecticut Chemical Research Corporation, Bridgeport, Conn., is building a factory in England in association with British interests, it has been announced by A. O. Samuels, president of the American company.

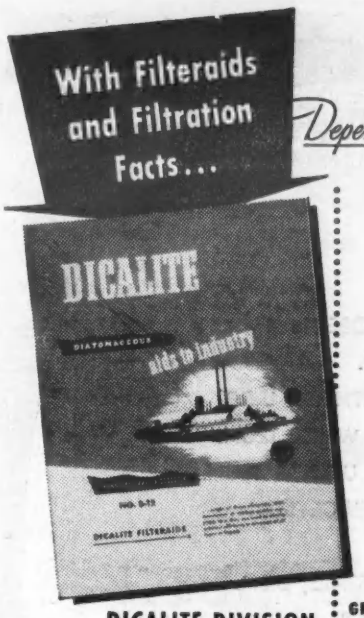
To be known as Midland Aerosols, Ltd., the new English plant, engineered and equipped by Connecticut Chemical Research Corporation with modern production equipment, is to be located in Wolverhampton, near Birmingham, and will begin operations about April 1 with an initial capacity of 100,000 units daily.

APMA Western Section

—Continued from page 7

the business and advertising manager of the American Medical Association. His topic will be "Effectiveness of Sales Promotion Channels for New Pharmaceuticals." At luncheon Frank McCarthy, director of public relations for 20th Century-Fox, will speak on "Revolution of the Motion Picture Industry."

This will be followed by two papers, "International Marketing Situation," by John L. Powers, jr., senior vice-president of Chas. Pfizer & Co., and "Breaking Old Habits and Establishing New Ones," by Lyle J. Purcell, vice-president, marketing and research department, Batten, Barton, Durstine & Osborne, Inc. The meeting will conclude with a panel, "Problems Encountered by Pharmaceutical Manufacturers in Introducing New Products to the Physician." Edward E. Bramlett, of Stuart Company, will be moderator. Participating will be Drs. Wendell R. Coffelt, Winston G. Nethery, Blake Watson and Edmund R. Evans.



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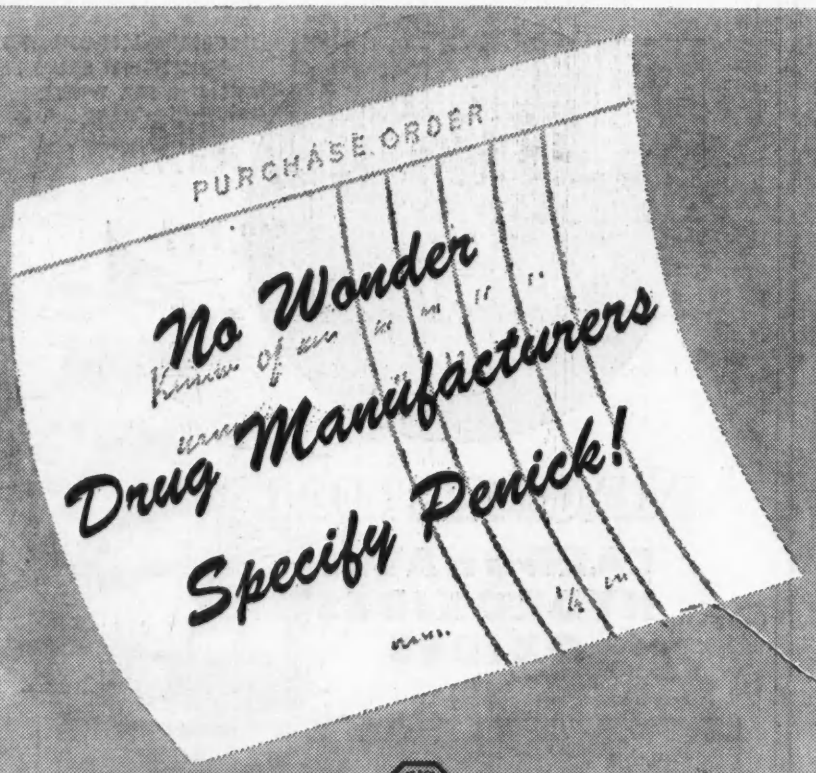

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Botanical Drugs, Spices, Gums

Price activity in this market was again concentrated among the seeds and spices. The botanical drug market continued rather stable, pricewise. The volume of trading activity in botanical drugs was generally below average levels for this time of the year but appeared to be gathering momentum, however. There were scarcities noted in several items particularly elm bark, orris and sarsaparilla roots. On the last item, at least one major supplier was reported to have withdrawn from the market due to inability to fill orders. Requirements of manufacturing consumers for white pine and wild cherry barks were reportedly mainly fulfilled for this season. Cascara sagrada was somewhat short while cocillana bark continued nominal due to a tight supply situation. Ergot showed some easing and prices were reported off 25 cents from prior levels.

There continued to be no firm offers from primary sources on vanilla beans. There was increasing uneasiness on the part of consumers as prices advanced an additional 25 cents last week on Bourbons and Mexican wholes and 50 cents on the cuts. Tahiti beans were up 35 cents on a purely nominal basis, there being no stocks on hand and no firm offers from the source.

Caraway seeds continued to advance last week. Spot quotations rose another ½ cent per pound and there was recurrent talk of an eventual 15 cent price at the source. Quantities of caraway being delivered to ports in Holland were reported at about half the rate of previous years. The carryover from the 1952 crop has been revised downward by one-third by Dutch sources, it was said. Decorticated, Guatemalan seed advanced 6 cents per pound while the latest report on green cardamom, afloat, was 35 cents higher on Ceylon seed. Coriander seed advanced ¼ cent on the Moroccan and ¾ cent on the Turkish. Turkish cumin seed was 1 cent higher. Jamaica ginger, No. 3, advanced 1 cent per pound while Jamaican pimento was upped 2 cents. Mexican pimento was increased 4 cents.

On the decline, Batavia cassia cuttings were off ½ cent while Saigon, all medium grade, was reduced 25 cents. French celery seed was 1 cent lower. Indian light fennel seed was off ½ cent. Spot black pepper had declined 10 cents, as of late in the week while white pepper held unchanged. Natural sesame seed, both Salvadoran and Nicaraguan, was down 1 cent per pound.

Barks

Black Haw-Root—Demand was generally routine. Supplies were ample and prices steady.

Cramp—Demand was steady. Prices ranged from 85c. to 90c. Supplies were adequate for consumer needs.

Elm—There continues to be no stock of grinding bark available. Prices on powdered elm bark remain nominal.

Beans

Vanilla—Over the past two week period, there have not been received any firm offers from origin, according to trade sources. The supply situation, if anything, has grown increasingly tight with prices steadily rising. Current quotations on Bourbon were up 25c., and ranged from $7.50 to $8. Mexican whole beans also 25c. higher and were currently offered at $7.75 to $8.25, on spot. Cut Mexican beans were entirely nominal at $7.75 while Tahiti beans were pegged at $7.25 nominal.

Herbs and Leaves

Catnip—Demand was quiet with supplies reported to be ample for consumer needs.

Imports Detained by FDA

Week Ended January 22

New York

Arnica Flowers, 12 bags; not arnica flowers.
Angelica Root, 200 bags; filthy.
Black Pepper, 40 bags; moldy and insect bored.
Capsicums, 216 bags; moldy and insect infested.
Cassia (29 lots), 3,704 bales; insect infested.
Juniper berries, 589 bags; filthy.
Lemon Oil, 10 cases; other oil substituted.
Mace, 22 bags; insects.
Nutmegs (4 lots), 773 bags; moldy and wormy.
Pimientos, 700 cases; decomposed; short weight.
Valerian Root, 63 bags; filthy.

Price Trends

Advanced

Drugs

None

Other Articles

Caraway seed, Dutch, ½c. per lb.
Cardamom, decorticated, Guatemalan, 6c. per lb.
green, Ceylon, 35c. per lb.
Coriander, Moroccan, ¼c. per lb.
Roumanian, ¾c. per lb.
Cumin seed, Turkish, 1c. per lb.
Dill seed, dewhiskered, ½c. per lb.
Ginger, Jamaica, #3, ½c. per lb.
Pimento, Jamaica, 2c. per lb.
Mexican, 4c. per lb.
Vanilla beans, Bourbon, 25c. per lb.
Mexican, whole, 25c. per lb.
cut, 50c. per lb.
Tahiti, 35c. per lb.

Reduced

Drugs

Ergot, 25c. per lb.

Other Articles

Cassia, Batavia, cuttings, ½c. per lb.
Saigon, all medium, 25c. per lb.
Celery seed, French, 1½c. per lb.
Fennel, Indian, light, ½c. per lb.
Pepper, black, Malabar, 10c. per lb.
Sesame seed, natural, Nicaragua, 1c. per lb.
Salvadoran, 1c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
114.02	113.99	112.86	106.96

(For Current Prices see page 9)

Roots

Blood—Demand for blood root was routine, according to trade sources. Prices were steady at 60c. to 65c.

Columbo—Supplies were still short and the market was nominal at 20c.

Goldenseal—Demand was slow, according to trade quarters. Supplies were ample and prices unchanged.

Mandrake—Demand was quite with supplies reported to be ample. Prices ranged from 32c. to 34c.

Orris—Prices continued quite firm in view of the tight spply situation. The outlook was for a continuance of current conditions in the immediate future.

Sarsaparilla—Stocks were virtually nonexistent. One major supplier revealed that he had withdrawn from the market due to lack of material.

Seeds

Caraway—Dutch caraway seed prices continued to firm last week, advancing ½c. per pound. The current price level ranged from 14c. to 14½c., on spot. Caraway has been firming in Holland over the past several weeks due to a government report in mid-November which cut previous estimates of crop carryover by one-third. Early reports had placed the carryover from the 1952 crop at 100,000 bags as estimated in June; 80,000 bags, estimated in August; with final figures published in November at 62,500 bags as of September 15, 1953. Scanty deliveries to the market by farmers despite rising prices have borne this estimate out, it was reported. Deliveries have been continuing at the rate of 2,500 bags weekly to Rotterdam and other points, as compared to 4,500-6,000 bag deliveries in previous years at this time. Reports of caraway prices reaching 15c. have been heard with increased frequency in recent weeks, trade sources noted.

Cardamom—Decorticated, Guatemalan cardamom seed advanced 6c. per pound last week. Current prices were about $1.94, on spot. Green, Ceylon cardamom was heard at $2.25, afloat. The last price here, on spot, was $1.90.

Celery—French celery seed was down 1½c. last week. The current price was 48½c. Indian seed was ½c. lower at 18½c. last week.

Coriander—Moroccan coriander seed advanced ¼c. per pound last week and was pegged at 7½c. Roumanian coriander seed was also priced at 7½c., an increase of ¾c. per pound.

Cumin—Turkish cumin seed advanced 1c. per pound. Current quotations ranged from 14½c. to 15c.

Dill—Dewhiskered dill was ½c. lower and was priced at 16c. per pound. There was little natural seed available, it was said.

Fennel—Indian light fennel seed was down ½c. per pound last week. It was quoted at 11½c. Other qualities were steady and unchanged.

Poppy—Dutch poppy seed was advanced ½c. to 18c. per pound. Other qualities went unchanged.

Sesame—Natural sesame seed was easier last week. Both Nicaraguan and Salva-

For Late Market Developments, See Page 4

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doran declined 1c. with the former quoted at 23c. to 24c. and the latter, 21c. to 22c.

Spices

Cassia—Batavia cuttings were somewhat easier last week, declining ½c. per pound. The current offering, on spot, was 16½c. Shortstick, cracked was down 1c. and was quoted at 17c. to 17½c.

Saigon, all medium, were reduced 25c. per pound. The current level on this quality was $1, it was noted.

Ginger—Ginger prices were generally steady with the exception of Jamaica No. 3, which advanced ½c. to 16½c. In the past few weeks, there have been some indications of the future trend in gingers this year. To date, shippers have not been overly inclined to sell new crop ginger at levels on a par with the spot market here. Stocks have been allowed to run low and it was expected that higher prices would rule the market in order to get stocks needed. Higher price levels were looked for this year.

Nutmeg—Prices on East and West Indian grades continued quite firm. East Indias were reported to be in poor supply, with West Indias straining to improve their position on the spot market. East India shippers have maintained, in the past, that it is very difficult to supply nutmegs which will meet the FDA standards. East India production has been light while, on the other hand, production of West Indias has been sizable. The scarcity of East Indias has helped the B.W.I. support program. It would appear that the stability of last year might be carried over into 1954, it was said.

Paprika — Prices were unchanged. Spain's production this year is reported as being a good deal larger than last year, yet to date the price is very steady. The short crop in 1952 helped Spain clean out all of its prior accumulation and likewise gave importers here a chance to sell off their stocks. Larger imports from Spain will be needed this year and the opening prices on the present crop should hold. Any attempt by Spain to advance this level would encourage shipments from other sources and reduce the total quantity that could be done here, it was said.

Pepper—By late last week, spot black pepper was quoted at 88c. with spot white pepper at 98c.

Prices slipped gradually during the week. The downward movement, however, was very orderly. Daily, the offerings from India were sizable and when they found no demand, shippers showed willingless to shade a cent or so. As yet, there has been no decided push by India, or any panic selling. Sarawak and Lampong offerings were not competitive for shipment, and play no important role in formulating market values. It looks that by March there will not be any Sarawak to speak of available in New York. Spot demand was limited to fill-ins, and generally, buyers seemed to feel it was well to await developments rather than extend coverage in futures. It has to be proven that the market in India can sustain itself, if this period of dull business continues.

The market in white pepper was strong in Indonesia, and shipment prices advanced sharply during the week. A fair business is to be reported in spots and afloats, and it is tending to raise the general level in line with the advance in replacement prices. However, the easier undertone in black pepper, has so far held the movement in check. Any firmness in black could cause white to spurt ahead.

Copra, Coconut Oil Exports From Malaya Up in Quarter

Exports of copra and coconut oil from Malaya in the third quarter of 1953 totaled 15,207 and 16,050 long tons, respectively, against 15,060 and 14,207 tons in the corresponding period of 1952, according to Jack R. Johnstone, agricultural economic officer at Singapore. The Netherlands was the largest outlet for copra, followed by India and Germany. Exports of coconut oil to India and Burma accounted for more than half the total movement. There were no exports of copra or coconut oil from Malaya to the United States.

Mr. Jonhstone also reported that Malayan palm oil and palm kernel output in the third quarter totaled 14,180 tons and 3,590 tons, respectively. Exports of palm oil amounted to 15,796 tons and palm kernels 4,405 tons with the bulk of the oil going to the United Kingdom, India and Canada, while the Netherlands took most of the kernels. There were no exports to the United States.

Buffalo PVLA Plans Ladies' Night

The Buffalo Paint, Varnish and Lacquer Association will hold its annual Ladies' Night party in the Sheraton hotel, Buffalo, February 6. Cocktails will be served at 6:30 p.m., followed by dinner at 7:00 and dancing from 10 p.m.

Pioneer Chemical Associates Names J. N. Hall President

Pioneer Chemical Associates, Inc., Denver, Colo., has named J. Newton Hall president. Mr. Hall was vice-president in charge of sales with Julius Hyman & Co. before organizing Pioneer in 1952. Greater emphasis will now be given to direct representation of major chemical manufacturers following the organizational development, but the company's activities and services will not be changed, it was stated. Other officers of the corporation are William S. Powers, vice-president, and A. S. Hall, secretary-treasurer.

Soybean Acreage Rise

—*Continued from page 4*

in stocks of food fats this year. But, barring increased exports, it was added, output of these fats will be large enough to result in some addition to stocks on October 1. However, most of these will be cottonseed oil and butter.

If commercial exports remain at about the levels of recent years, between 1,000,000,000 and 1,100,000,000 pounds, total requirements for all edible fats and oils in 1954-55 would be about 9,000,000,000 pounds. This includes domestic food use at about the same per capita rate as in recent years and about 500,000,000 pounds for certain non-food uses. Probably over 6,000,000,000 pounds would be obtained from current production and imports of food fats other than soybean oil, it was stated. Thus, less than 3,000,000,000 pounds of soybean oil (including oil equivalent of soybeans exported for crushing) would be needed.

More Soybeans Would Depress Meal

A large increase in soybean output would depress prices of soybean meal. Prices probably would average lower than in recent years relative to prices of other feeds, particularly corn and cottonseed meal. This winter, prices of soybean meal are higher than in recent years relative to prices of cottonseed meal, most other high protein feeds and corn. The support price for the 1954 corn crop is not likely to differ greatly from the 1953 level, since the law requires support to be set at 90 percent of parity. Support prices for 1953 oats, barley and sorghum grains are 6 to 8 percent lower than for the 1953 crops. Cottonseed meal prices will be influenced somewhat by the reduction in production that will result from acreage allotments, department analysts said.

Excess crushing capacity in the soybean industry in recent years has been reflected in intensive competition for the bean which has had an upward effect on soybean prices received by farmers. It is estimated that in the 1951-52 crop year only about 75 percent of total crushing capacity was used. If soybean output in 1954 is well over 300,000,000 bushels most of the gap between bean supplies and crushing capacity would be closed. Hence competition for beans would not be as great and prices received by farmers would be expected to be lower, relative to the value of the oil and meal than in the past several years.

It was announced January 22 that 1953 crop soybeans will be supported at $2.21 per bushel, farm basis, 34 cents less than the year before. Support for the 1954 crop is at 80 percent of parity compared with 90 percent a year earlier. It was also announced that there would be no acreage allotments on the 1954 soybean crop. Soybean prices probably would decline to or below the support level if production is expanded considerably above 300,000,000 bushels. Prices would partly depend on storage and marketing facilities which would have a bearing on how effectively farmers could utilize the price support program. Soybean prices also will be affected by decisions regarding price support for cottonseed. So far during the current marketing season, prices received by farmers for soybeans have risen from below support in October to about 20 cents per bushel above support at present.

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Essential Oils, Other Aromatics

An advance of 0.08 point in the index brought this figure up to 145.22., following a week of fairly brisk business in the essential oils and aromatic chemicals market. Many consumers were conscious of the upward trend in citronella, lemongrass, ocotea cymbarum and petitgrain oils, and were convinced that purchases in these items should be made immediately before further advances took place. The aromatic derivatives of these oils were also stronger. In addition, a broad list of items that did not show an immediate upward trend were nevertheless in good demand.

The crop failure that reduced by almost half the output of the Alleppey cardamom crop brought strength to prices of this oil. Material from sources other than Alleppey was stronger in sympathy. Cedarwood oil continued to strengthen. Cold weather in the country has hindered production and has been the chief factor in the rising spot market. Lemongrass oil advanced further, as shippers continued to firm their outlook. Most Central American producers were reported as out of the picture, making this oil virtually a one-source material.

Eugenol, USP, was raised by the manufacturer maintaining the minimum price for this grade of the material. Spot prices firmed for cinnamon bark and wormseed oils.

Bourbon vetiver oil continued the descending movement of the recent past with a further drop in the spot price. Dalmatian sage oil was also weaker from one suppplier. Business in orange oil was considered satisfactory, with orders for summer production of ice cream adding to the demand for this item. Ocotea cymbarum oil remained scarce, with offerings from the source negligible and a firmer spot market expected.

Price Trends

Advanced

Eugenol, USP, 5c. per lb.
Oil, cardamom, $3.50 per lb.
Lemongrass, 10c. per lb.
Wormseed, 20c. per lb.

Reduced

Oil, sage, Dalmatian, 75c. per lb.
Vetiver, Bourbon, 85c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
145.22	145.14	148.98	161.49

(For Current Prices see page 9)

Essential Oils

Cardamom—A crop failure that reduced the output of Alleppey yield by almost half has given considerable strength to the market for this oil. An earlier quotation of $29 per pound was raised to $32.50, this offer forming the new minimum. Material from sources other than Alleppey was stronger in sympathy, and the outlook was for a firmer market for the coming weeks.

Cedarleaf—Prices held steady at their recently advanced level, with a quotation at $2.05 forming the low-of-the-range Higher costs for replacement were cited as the cause of the advances, and as the reason for a continuing market at today's price levels.

Cedarwood—The cold weather in the country that has hindered production has been the chief factor in the rising costs on the spot market. Dealers stated that they were moving every drop that they had, but expected an easing in the supply situation once producers in the country could operate at their usual levels. The shortage in the market was expected to be relieved before any critical situation developed.

Cinnamon—Bark oil advanced on spot over the past week, going to $25.50 per pound, a gain of $7 over the earlier figure. Leaf oil was as yet unchanged, and was offered from a minimum of $1.25 per pound. Cinnamon USP (cassia) oil continued to be virtually unobtainable. Large stocks have been built up in China, it was reported in the trade, and obtaining material would offer no difficulty, if the government again permitted trade with communist China.

Clove—Prices for bud oil, continued to weaken, in line with the drastic decline in prices for the spice. Quotations for February and March delivery from many sources represented further cuts. Some dealers felt that a reversal in this downward plunge might be in the making, since they expected some firming in costs of the raw material. One dealer who offered USP material at $4 for March delivery stated that their present commitments at this figure were covered, but that they might not be able to maintain such a price for an extended period.

One trade source has reported the following information concerning the clove leaf oil situation in Madagascar:—

"We have reports that following fairly heavy purchases from Holland, England and other European countries, the stocks of clove leaf oil existing in France are practically nil. We also understand that gradually the stocks in Madagascar have reduced considerably following purchases both from the continent as well as from the U. S. The market at the present time is extremely strong both in France and in Madagascar and it is difficult to obtain offers for more than a few tons at a time.

"It is to be noted that the distillation which usually hits its peak in March will be put off somewhat and probably will not reach its peak until late April in view of the fact that the clove crop was extremely heavy this year and instead of terminating in February, will probably go into March and maybe even the first part of April. It is estimated, therefore, that we cannot look forward to easier prices for Clove Oil Madagascar until March or maybe even April. It is reported that the Madagascar government may impose a floor price on this oil, as they have done for clove spice."

Lemon—The Italian lemon oil outlook appeared unsettled. Some trade observers expected easier prices in the coming weeks, maintaining that dealers in Messina realized that the price level in effect recently made the oil too high to compete with California material. A rise rather than a drop in prices was expected from others in the trade, however, who cited the recent heavy purchases of fresh fruit in Italy as a source of strength in the coming weeks. California material was offered from $7.10 to $7.50, according to brand and supplier. Demand for oil has run quite high, and over the past week, no letup in inquiry was perceived, keeping the supply situation very tight.

Lemongrass—The strong replacement situation lent further support to the spot market, causing a jump of 10c. in the low-of-the-range price. $1.35 per pound was the lowest offered on the market, with other offers ranging higher than this. Offerings from South America have been drastically lower in quantity, and this has strengthened the outlook of shippers in India.

Ocotea Cymbarum—Very little, if any, material was offered from Brazil and the spot market continued advancing. An offer of 68c. was the lowest of the range.

Orange—The market continued favorable for the consumer, with prices holding steady and stocks ample to cover most demands without difficulty. Contracts with ice cream makers for summer business have been completed, it was stated by some suppliers, and indications were that demand for the oil for this account would be good. California material ranged from 70c. to $1.25, depending upon brand. Florida oil was priced from 64c. Oil of African origin was offered from one source at $1.55 per pound.

Petitgrain—The rising market at the source has brought a stronger tone to the spot situation for this material. Oil was priced from $2.60 per pound, but the situation was subject to change very shortly. Offerings from the source have been far short of normal amounts. Reports had circulated that exportation of petitgrain from Paraguay to the United States had been curtailed or prohibited due to some compensation business done between France and Paraguay. These reports, however, have been declared unfounded by word received by a trade source from one of its principals in Paraguay.

Sage—Dalmatian oil was dropped in price by one source, bringing the low-of-the-range down to $6.75 from $7.50. Other sources were as yet unchanged. Spanish material was offered from 90c. per pound.

Spearmint—Following a production advance by some fifty percent over that of the previous year, prices have made no substantial gains in the past weeks. A low-of-the-range of $6 per pound was maintained over the past week, and dealers expected no immediate alterations in this figure. Buying has been active, it was reported, indicating that consumers were not expecting a weaker market in the near future.

Vetiver—The spot market has not re-

For Late Market Developments, See Page 4

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covered from the series of price drops that brought Bourbon material to its lowest level in more than a year. A price of $15 per pound was offered during the past week, a decline of 85c. from the earlier minimum. Inquiry was described as moderate at best and replacement adequate to supply the market's requirements.

Wormseed—The low-of-the-range price firmed to $4.60, an advance of 20c. Supplies were considered quite adequate, and the outlook was for a continued steady market without any greatly changed price level.

Aromatic Chemicals

Citronellal—A price of $1.85 per pound represented the market's minimum, but this figure was expected to be moved ahead in the near future. Recent sharp advances in the price of citronella oil have pushed up the costs of derivatives. Some manufacturers have revised their price schedules on derivatives, and those who have not done so as yet expected to find it necessary to do so shortly.

Citronellol—Prices remained quite firm, from a low-of-the-range figure of $2 per pound. With costs of the raw material spiralling, advances in this aromatic derivative were expected in the near future.

Eugenol—Material of USP specifications was offered from $1.40 per pound and up, depending upon supplier and quantity purchased. The present minimum represented an advance of 5c. per pound over the previous low-of-the-range, offered from the same source. Inquiry has held up quite well, it was stated by the makers, and a good rate of demand was expected in the coming weeks. Technical material, as well, has been in active demand from those consumers not requiring the high degree of purity in the USP grade.

Geranyl Acetate—A price of $1.45 per pound formed the low-of-the-range for this material. Quotations have been steady over the past week, but were firmly maintained at present levels.

Safrol—Prices from all sources were firm at recently advanced levels. Not to much material was available on the market, and with demand continuing active, the market showed a very firm undertone. The market situation of this item has been affected by the growing scarcity of ocotea cymbarum oil and artificial sassafras oil. Some further price adjustments in an upward direction were expected in the coming weeks, it was stated in the trade.

Gen'l Mills Names Weber

Carl W. Weber has been appointed sales assistant in the chemical division of General Mills, Inc., Minneapolis, Minn. Mr. Weber will be responsible for office operations of the division's sales department at Kankakee, Ill. He joined General Mills in 1935.

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Olive Oil Offered by USDA From '51 Support Program

The Department of Agriculture announced January 28 an offer to sell 202,000 gallons of olive oil for export or domestic use. The oil is all that remains in CCC inventory from the 1951 price support program and is at two locations in the San Francisco Bay area. Purchase offers must be receved by the Portland, Ore., office not later than noon, P.S.T., February 10. The oil is being made available for sale in minimum quantities of ten drums but the entire quantity may be sold as one lot on an "as is" basis with respect to quality.

Catforming Unit on Stream At Atlantic's Plant in Phila.

Atlantic Refining Company has announced that it has constructed and put on stream at its Philadelphia refinery the first catforming unit on the east coast, having a productive capacity of 500,000 gallons of high octane gasoline daily. This completes the initial phase of the $50,000,000 modernization portion of the Atlantic refinery capital expenditure program.

Now being constructed are a synthetic ammonia plant, the first in the Philadelphia area; a catalytic cracking unit which will be the largest of its type in the world; a distillation unit with a running capacity of 50,000 barrels of crude oil daily, and an aviation alkylate unit. In addition to its output of high octaine gasoline, the new catforming unit will produce hydrogen as a byproduct. This will be combined with nitrogen obtained from the air to produce ammonia.

Bids Wanted

Dye, violet, 26,285 lbs., for colored smoke mix, inv. 106B, Feb. 17, N. Y. Chem. Procurement District, 180 Varick St., N. Y., N. Y.

Insecticide, 168 cans DDT, 25% emulsion concentrate, 1,440 DDT aerosol bombs, inv. SE-F-4713-54-1, Feb. 5, Gen. Services Adm., 909 1st Ave., Seattle 4, Wash.

Paint, 1,200 1-gal. cans enamel, interior, gloss, 400 5-gal. cans same, 300 1-gal. cans semi gloss, interior, synthetic enamel, 300 5-gal. cans same, 12 5-gal. cans oil, linseed, boiled, 120 1-gal. cans paint, rubber base, for concrete floors, 360 1-gal. cans thinner, enamel, synthetic, 1,832 gals. turpentine, gum spirits, inv. WCL-3527, Fed. 2, Gen. Services Adm., Fed. Supply Service, Room 212, Fed. Bldg., Public Square, Cleveland 14, Ohio; 1,000 gals. enamel, floor and deck varnish base, inv. 3G-39710-R, Feb. 5, Gen. Services Adm., Business Service Center, Region 3, 7th & D Sts., S.W., Washington 25, D. C.; 800 gals. paint, ready-mixed, flat finish, 60 gals. paint, oil, interior, inv. MA-64, Feb. 10, Contracting Office, Military Academy, West Point, N. Y.; 136 gals. paint, white lead base, 1,430 gals. paint thinner, inv. DA-33944, Feb. 9, Gen. Services Adm., Business Service Center, 1114 Commerce St., Dallas, Tex.; 420 gals. enamel, floor and deck, 360 gals., enamel, semi-gloss, inv. 2S-KC-31260, Feb. 10, Gen. Services Adm., Fed. Supply Service, 911 Walnut St., Kansas City 6, Mo.

Sodium metasilicate, 20,000 lbs., inv. NY-3J-52577, Feb. 5, Gen. Services Adm., Region 2, Business Service Center, 250 Hudson St., N. Y. 13, N. Y.

Ultramarine blue, 3,000 lbs., suitable for use in formulation of printing inks, inv. BEP-91, Feb. 2, Bureau of Engraving & Printing, Treasury Dept., 14th & C Sts., S.W., Washington 25, D. C.

Urea, 216,000 lbs., crystals, to be used in manufacture of other chemicals, inv. 174-49-54, Feb. 2, Supply Officer, Navy Dept., 111 E. 16th St., N. Y., N. Y.

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Protective Coatings Materials

Cadmium reds and orange increased last week, due to the recent rise in the cost of selenium metal. Copal and dammar gums continued very scarce on spot, and increased prices for some grades were initiated by suppliers in this country. Tripoli increased $15 per ton. Red, vermilion, quicksilver increased, and TN shellac declined.

In the dry colors market, buying activity was classified anywhere from fair to good. Demand was easy for carbon blacks, and average for chrome green. Lead pigments continued to move at a good rate, as did lithopone and most zinc pigments. Interest in synthetic iron oxides was slow, while moderate demand was reported for titanium dioxide.

Most sources felt that trade in synthetic resins had improved since the first of the year, with the possible exception of ester gums. These items continued to move to a mild demand. An upswing in interest was noted for alkyds, maleics, and phenolics. Two different trade pictures were given in the lacquer materials field. On one side, demand was said to be excellent, with a large volume of material moving to consumers, while on the other hand, some sources reported that December had been a better month than January.

No price changes were recorded last week for dammar gum, but supplies were very tight for many grades. The London and Calcutta shellac markets were easier, with prices for orange and bleached grades of shellac in this country unchanged on spot. Among fillers and inerts, calcium carbonate was without significant change, while fuller's earth enjoyed an increase in buying demand. Casein remained unchanged in price, with domestic consumers showing only fair interest.

Prime Pigments

Antimony Oxide—Trade continued fair to average over the week, with consumers interested mainly in prompt shipment. Prices were unrevised, and held steady after recent declines.

Cadmium Colors—Among cadmium lithopone colors, red, deep shade, increased 9c. per pound, offered last week at $2.02 per pound, freight allowed east of the Rockies. Light shade increased 5c., offered at $1.75, same basis. Maroon was up 10c., offered at $2.15, same basis. Medium rose 7c., selling at $1.92, same basis. Medium light shade increased 6c., offered at $1.83, same basis. Orange-red shade was up 2c., offered at $1.66, same basis. Orange cadmium lithopone was also increased 2c. per pound, offered at $1.61, same basis.

The increase was brought about due to the recent rise in price of selenium metal, which has become increasingly scarce owing to government demand for use in rectifiers and other electronics equipment. The variance in price rises for the different colors was said to be dependent upon the amount of selenium used.

Chrome Green—Material was offered at unchanged prices during the week. There were plenty of supplies on hand to fill consumer needs. Buying interest was average.

The Bureau of Census reports that 570 tons of CP chrome green were manufactured in November, as compared with 617 tons produced in October, and 689 tons produced in November, 1952.

Lead Pigments—Prices remained unchanged after recent reductions for oxides, litharge, orange mineral and monosilicate. Long standing white lead prices also continued without revision. The metal market was said to be somewhat steadier this week, resulting in a more stable position for the pigments.

Red, Vermilion, Quicksilver — Price jumped 21c. per pound last week, reflecting activity in the quicksilver market.

Synthetic Iron Oxides—Consumer interest was slow during the week, as suppliers reported that many buyers had ample stocks of their own, and for that reason were reluctant to come into the market. Nevertheless, prices continued unchanged. Supplies were available to promptly fill customer needs.

Titanium Dioxide—There were no price changes during the week. Supplies were holding up very well, according to most sources. Consumer interest was said to be moving along normally, with no immediate changes in the general market picture contemplated.

Zinc Oxide—Pricing schedules continued without change last week, as neither American nor French process material reacted to the recent ½c. per pound decrease in the cost of metal. The market for metal appeared steadier to most observers, and there were no changes contemplated for the present time.

Price Trends

Advanced

Gum, copal, Manila, CBB, 1c. per lb.
DBB, 1c. per lb.
soft, WS, 3c. per lb.
Philippine pale chips, 2c. per lb.
nubs, 1c. per lb.
seeds, 1c. per lb.
Orange, cadmium lithopone, 2c. per lb.
Red, cadmium lithopone, deep shade, 9c. per lb.
light shade, 5c. per lb.
maroon, 10c. per lb.
medium light, 6c. per lb.
orange-red, 2c. per lb.
Vermilion, quicksilver, 21c. per lb.
Tripoli, $15 per ton.

Reduced

Shellac, TN, 1c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
94.68	93.65	93.86	88.44

(*For Current Prices see page 9*)

Synthetic Resins

The following production information comparing October and November output in pounds, was supplied by the Tariff Commission:—

Production

	*October	†November
Phenolic and other tar acid resins:—		
Laminating resins	5,715,604	5,403,268
Adhesive resins	1,001,456	1,184,721
Protective coating resins, unmodified, modified except by rosin	2,015,597	1,369,916
Urea and melamine resins:		
Adhesive resins	8,157,020	7,676,653
Protective coating resins, straight, modified	2,864,064	2,697,828
Styrene resins:—		
Protective coating, resins, straight, modified	5,942,285	7,245,635
Vinyl resins:—		
Total, all types	41,170,006	39,129,446
Alkyd resins for protective coatings:—		
Phthalic anhydride types unmodified	23,137,315	20,130,798
Modified with tar acids, rosin and/or other materials	5,935,390	5,358,493
Polybasic acid types except phthalic:—		
Unmodified	554,564	1,400,573
Modified with tar acids, rosin and/or other material	734,436	670,396
Rosin modifications for protective coatings:—		
Rosin, rosin esters, unmodified (ester gums, etc.):—		
Esterified with glycerol	1,540,648	1,283,369
Esterified with other alcohols	1,445,127	2,025,149
Rosin, rosin esters, modified:—		
Modification with phenolic and other tar acid condensates	1,726,285	1,556,963
Modification with maleic and fumaric acids	2,896,189	2,527,066
All other modifications	2,553,225	2,343,070
Coumarone-indene and petroleum polymer resins	17,201,173	15,948,167
Miscellaneous synthetic plastic and resin materials:—		
Protective coating resins (including epichlorohydrin, acrylic, polyester, silicone and other resins)	763,562	893,321

*Revised.
†Partially estimated.

Alkyds—Business was said to have improved since the first of the year, as consuming demand took an upward swing. Supplies were reported in good shape, with stocks in most cases available for early shipment. Prices underwent no significant changes.

Ethylcellulose—One producer increased flake material 4c. per pound, effective March 1. It was the first advance in flake in more than three years. Other makers had not acted upon the rise by presstime.

Maleics—Sales continued to improve as demand from consuming industries picked up. Users continued to buy heavily for industrial finishes as production of new model automobiles, refrigerators, and similar appliances picked up. Producers reported no shortages of material.

Phenolics—A source pointed out last week that one reason for recent reductions was the doubling of production capacity for butyl phenol. Butyl phenol resins can be used in industrial primers, floor finishes, spar varnishes for marine applications and house exteriors, and for chemical equipment coating, it is said. The market position for phenolics in general was said to have improved considerably since the first of the year.

Lacquer Materials

Dibutyl Phthalate—While some sources felt that business had enjoyed a sizable upswing over the fast few weeks, others were inclined to be less optimistic, preferring to withhold judgment until later.

For Late Market Developments, See Page 4

Some even reported that December had been a better month than January, as far as sales were concerned. All sources were agreed, however, that plenty of material was on hand to satisfy consumer needs. Prices were unchanged.

Dioctyl Phthalate—One observer felt that since the recently lowered prices for this material went into effect, consumers have been more active. Others felt that demand had not picked up as expected since the first of the year. Present output and stocks were plentiful, and offered at unchanged prices.

Tricresyl Phosphate—The petroleum industry continued its strong demand for use in premium gasoline. Moreover, increased activity was noted from the paint industry over the past week. Research and development were said to be playing an important part in the expanding number of uses for this material. Producers were able to furnish consumers with as much as thew needed at unchanged prices.

Triphenyl Phosphate—There were no price changes during the week. Consumer interest held at good levels, with stocks readily available to fill requirements.

Natural Resins

Copal Gum—A flurry of buying interest, coupled with scarcity of several grades both in the Far East and on spot, brought prices up last week. Manila CBB rose 1c., new price being 24c. to 26c., bags, spot. DBB also increased 1c., new listing being 22c. to 25c., same basis. Soft WS, although no one showed much interest here, rose 3c. per pound owing to nearly depleted supplies. Philippine pale chips were up 2c., offered at 21c. to 24c. per pound. Nubs rose 1c., new listing at 30c. to 32c. per pound. Seeds also inclined 1c., offered at 16c. to 17c. Supplies of most grades were extremely low at point of supply. There was practically no DBB available in this country, and Congo gums were said to be just about as poorly off.

Dammar Gum—Prices were expected to momentarily reflect the increasing tightness of supplies both in this country and abroad. Singapore gums were said to be relatively unavailable here, with little likelihood of early or plentiful replacement. While domestic buying interest increased last week, continued strong foreign demand exerted unrelenting pressure on supplies.

Shellac—The London and Calcutta markets continued to soften last week, due partly to large scale lack of consumer interest, as well as persistent preliminary rumors of a good new crop. Prices for bleached grades in this country continued without change, while quotations on spot for orange grades were considered quite shaky. Stocks on spot were plentiful.

Fillers and Inerts

Tripoli—A $15 per ton increase was effected by one producer recently. The rise was thought largely due to an increase in operating costs. Airfloated material sold at $55 per ton, carlots, works. Single-ground was offered at $50 per ton, same basis, and double-ground, $50, same basis.

Miscellaneous Materials

Casein—Prices remained basically unchanged both on spot in this country and in the Argentine. Material was quoted here duty paid at 21½c. to 23c., spot, depending on quality. Consumers here displayed light interest, but were said to have become more of a factor last week than previously. There was speculation that France and Denmark might become active later on, making attractive offerings. However, it was pointed out that this situation had no bearing on the present market position.

Naval Stores

Rosin, Gum

(USDA, per 100 lbs.)

	Fri.	Mon.	Tues.	Wed.	Thur.
Drums—					
K	$7.58	...	...	...	...
WG	8.02½	...	$8.00	$8.05	...
WW	8.13	...	8.10	8.13	$8.13
Bags—					
M	7.75	...	...	...	...
WG	...	...	...	...	7.83½
WW	...	...	...	...	8.05

Tankcars (for week ended January 22)—N $7.65, K or better $7.39½, 972*.

Sales, USDA: 1,038* ... 574* 285* 715*

New York (per 100 lbs., c.l., Friday)
B through N $8.70, WW $9.10, WG $9.00.

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	.529‡	.5275	...	.5275
Sales	...	14,000¶†	26,000¶†	...	4,000¶†

New York, Friday, per gal. 7 lbs., tankcars, 59c., l.c.l. 70c.

*Drums equivalent. †Tankcars. ‡Carlots. ¶Gallons. §Average price.

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Oilseeds Production, Planting In Burma Seen on Increase

Burma's 1953-54 production of major oilseeds should be somewhat above the 300,000 short tons produced in the preceding season, reports James H. Boulware, agricultural attache, American Embassy, Rangoon.

The area planted to oilseeds in 1953-54 was reported at 2,424,000 acres against 2,310,000 acres in 1952-53. Production of major oilseeds in the past season consisted of 199,000 tons of peanuts, 61,000 tons of sesame, and an estimated 40,000 tons of cottonseed. Some increase in the 1953-54 acreage was indicated for all of the above crops, with the largest increase in peanuts. Plantings in the current season were reported as 802,000 acres in peanuts, 1,321,000 acres in sesame, and 301,000 acres in cotton.

Synthetic Fibers Prices Are Reduced by duPont

Price reductions ranging from 11 to 16 percent on staple fibers and tow of nylon, "Orlon," and "Dacron" were announced last week by E. I. duPont de Nemours & Co., Wilmington, Del. The action will bring the base prices of nylon staple and "Orlon" acrylic staple to $1.50 a pound and "Dacron" polyester staple to $1.60 a pound.

Vitro Opens in Washington

Vitro Corporation of America has opened an office in Washington, D. C., located at 726 Jackson place, N. W. The new office will be occupied by Edward G. Littel, assistant to the president, and Charles J. Roggi, foreign projects representative. Vitro has its executive offices in New York.

Cyanamid Appointee

Dr. Richard O. Roblin, chemotherapy research scientist, has been named assistant general manager of the research division of American Cyanamid Company, New York. Dr. Roblin, co-discoverer of sulphadiazine, had been director of the chemotherapy division of Cyanamid's consolidated research laboratories at Stamford, Conn.

Trade Briefs

Kyanize Paints, Inc., Everett, Mass., has elected Hildreth Auer a director of the company.

Glidden Company, Cleveland, Ohio, has appointed Ronald S. Cameron manager of its metropolitan branch at Scranton, Pa.

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Oils, Fats and Waxes

Of great interest in the oils and fats market last week was the report that visible cottonseed oil stocks were at an all time high, plus knowledge that consumption was holding at a good rate. However, favorable consumption reports did not have the effect anticipated, and interest failed to show improvement. Rumors of possible shortages in the future of soybeans for crushing did nothing in particular to stimulate activity in that market.

Among other oils, the strike at a leading harbor storage terminal tied up stocks sufficiently enough to send some quotations upward, although buying activity for the most part remained spotty, and for immediate needs. Tung oil was firm, with consumers standing on the sidelines. Rapeseed also firmed fractionally as a result of the labor tieup. Peanut oil gained slightly in strength, as uncertainty prevailed concerning how much raw material would be released by the government for crushing. Linseed oil continued dull, with scanty fill-in business reported on the Minneapolis market. Trade for flaxseed continued fairly steady.

Tallows and greases displayed slightly increased strength last week, as demand for export held up well. Fractional advances were noted for yellow grease and bleachable fancy grade of tallow. Consuming interest remained low for light pressed refined fish oil, as firm bids for large lots could have shaded prices. Crude menhaden oil, new crop, was offered at a relatively nominal price similar to that asked for nearly extinct old crop material.

The market for waxes continued to ease, as carnaubas dropped reflecting the lack of interest here. It was said that replacements from abroad failed to elicit demand as well. Ouricury was firm on spot in this country, due to an almost complete lack of stocks, and little sign of replacement. Crude grades of beeswax continued firm, despite lack of domestic demand.

Price Trends

Advanced

Grease, yellow, ¼c. per lb.
Lard, ½c. per lb.
Linseed meal, $1 per ton.
Oil, corn, crude, ⅝c. per lb.
Olive, 5c. per lb.
Peanut, crude, ½c. per lb.
Rapeseed, ¼c. per lb.

Reduced

Copra, $5 per ton.
Cottonseed meal, 50c. per ton.
Oil, coconut, crude, ¼c. per lb.
Linseed, 0.2c. per lb.
Palm, 0.15c. per lb.
Soybean, crude, ½c. per lb.
Tung, ¼c. per lb.
Soybean meal, $1 per ton.
Wax, carnauba, No. 3, Ceara crude, 1c. per lb.
refined, 1c. per lb.
Parnahyba, crude, 1c. per lb.
Yellow, No. 2 Ceara, 1c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Jan. 30, 1953
103.52	105.80	101.39	105.31

(For Current Prices see page 9)

Vegetable Oils

Coconut—Crude was off fractionally at 16¼c. per pound, tankcars, f.o.b. Pacific coast, January shipment. Local trade was quiet, with tankcars quoted unchanged at 17½c. per lb, New York basis, immediate shipment.

Copra—Trade continued slow. Shipments declined to $220 per ton, c.i.f., Pacific Coast.

Corn—Market maintained steadiness and was fractionally higher. Crude oil sales were made at 13⅜c. per pound, f.o.b. mills, for January delivery. Refined oil continued at 16⅜c. per pound, tankcars, New York.

Cottonseed—Trading in futures continued light last week, with slight declines. Hedging continued scattered. Despite a favorable consumption report late in the week, interest did not increase. Rumors to the effect that butter would be domestically subsidized had little or no effect on trade, largely due to the failure of previous plans to materialize. A wait and see attitude was maintained. Consuming interest for refined oil was fairly good, with tankcars held at 16c. per pound, New York delivery. Crude cottonseed oil was irregular, with sales at 12c. per pound, tanks, f.o.b. mills, Southeast. Prices nominal at 12c., same basis, Valley, and 11⅞c. to 12c., same basis, Texas, although some west Texas sales were reportedly at 11¾.

Refined December cottonseed oil consumption amounted to 2,267 tankcars of 60,000 pounds each, as compared to 2,681 tankcars for November, and 1,658 tankcars for December, 1952. Visible supplies at the end of December totaled 34,498 tankcars, an all time record high, as compared to 32,951 tankcars (revised) for November, and 23,052 tankcars at the end of December, 1952.

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended January 29 follow:—

	Sales	Cents per pound High	Low	Close
March	33	14.88	14.65	14.75@14.83
May	75	14.84	14.64	14.74@14.75
July	45	14.73	14.56	14.55@14.56
September	9	14.15	14.10	14.17@14.23
October	3	13.81	13.80	13.70@13.90

Total sales, 165 contracts.

Flaxseed—Offerings were light. Market activity was limited and relatively steady.

Minneapolis.—Cash flaxseed continued to move around the $4-a-bushel mark here last week but offerings were light. Activity was limited in both the cash and futures markets. Receipts of seed for all accounts totaled 129 cars during the week, compared to 216 cars the previous week and 107 cars a year ago. Of this total, only about 21 cars were for spot cash sale. To-arrive bookings amounted to 14 cars and 32,000 bushels in varied-sized lots out of store. Shipments of seed from Minneapolis totaled 35 cars as against 32 cars the previous week and 24 cars a year ago.

Receipts and shipments of flaxseed, in bushels, were as follows:—

	Receipts 1953-54	Receipts 1952-53	Shipments 1953-54	Shipments 1952-53
Past week	225,750	181,900	61,250	40,800
Since Sept. 1	13,403,350	10,960,400	2,656,950	1,798,950

Linseed—Demand continued relatively spotty, with material taken in light volume. Selling price at Minneapolis was off to 14.2c., and could be shaded for large quantities.

Minneapolis.—Dull was the word for the linseed oil market here the past week. Only small fill-in business was reported, and very little of that. Inside asking price on raw linseed oil was 14.2c. per pound, tankcars, f.o.b., Minneapolis, with some crushers holding at a higher level. Outside tankcar price was 14.5c. and warehouse basing price was 15c., Minneapolis. Shipments remained modest and at about the same level as a year ago.

Shipments of linseed oil, in pounds, were as follows:—

	1953-54	1952-53
Past week	5,400,000	5,460,000
Since Sept. 1	131,040,000	158,240,000

Oiticica—Buying interest was still low last week. Prices were firm, however, mainly due to a labor tieup at a storage tank plant in the New York area, which froze stocks to a considerable extent Refined oil continued at 16¾c. to 17c. per pound, tankcars, New York, and was relatively unavailable due to the strike. Drums were unchanged at 18½c. to 19c. per pound, depending upon quantity.

Olive—Strong foreign activity brought prices up 5c. last week. Prices ranged from $2.35 to $2.45 per gallon, drums, spot, duty paid, according to quantity and quality. Domestic interest remained spotty, with customers interested chiefly in small lots for immediate needs.

Palm—Interest improved slightly last week, with clarified oil quoted 0.15c. per pound higher. Current offering price was 12¾c. per pound, drums, spot delivery. Tankcar price was firmer at 11¼c. per pound, spot.

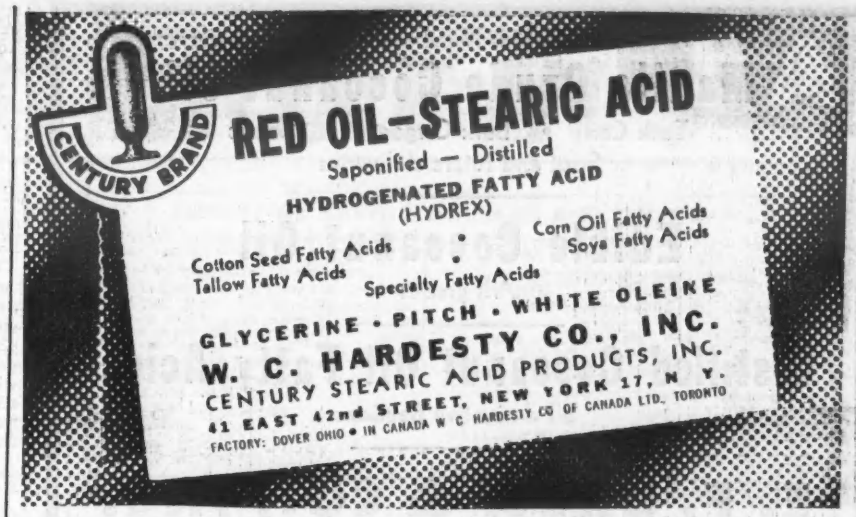
Peanut—Crude oil gained in strength, eding upward to 18½c. per pound, f.o.b. Mills, prompt delivery. Refined held steady at 22c. per pound, tankcars, New York basis. Demand continued fairly good, particularly for export. Uncertainty continued as to the amount of peanuts the government would release for crushing, but it was believed that a small quantity would be sold by the government every week for the next few weeks.

Rapeseed—Due to the storage terminal strike, scarcity of stocks firmed prices fractionally, with refined oil offered to spotty interest at 16½c. per pound, tankcars, New York.

Soybean—The market was steadier last week, with sales made at 12c. per pound, tankcars, f.o.b. Decatur, prompt delivery. Refined salad oil was higher, at 14¾c. per pound, tanks, New York delivery. Trading in futures was irregular, closing slightly lower. A report in the week indicated that crushing of soybeans could not be continued at the present rate without depleting supplies long before the end of the season.

Crude soybean oil consumption for December is reported to have been 3,212 tankcars of 60,000 pounds, as compared to 3,646 tankcars for November, and 3,543 tankcars for December last year. Visible

For Late Market Developments, See Page 4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Sales and prices of crude soybean oil futures on the N. Y. Produce Exchange in tankcars (60,000 pounds) for the week ended January 29 follow:—

	Sales	Cents per pound High	Low	Close
March	16	12.00	11.85	11.99S
May	42	12.02	11.83	11.98@12.00
July	25	12.00	11.87	11.95@12.00
September	1	11.40	11.32	11.35@11.42
October	9	10.90	10.55	10.62@10.75
December	1	10.50	10.40	10.30@10.50

Total sales, 94 contracts.

Tung—Prices continued nominal, with firmness brought about due to the strike which is tying up the leading storage tank plant in the area. However, consumers preferred to await further developments with the result that tankcar prices were off fractionally to 23¾c. to 24c. per pound for nearby. February-March delivery was fractionally higher at 23½c. per pound.

Fats and Greases

Greases—Continued good export inquiry affected trade although domestic demand remained on a hand to mouth basis. Yellow greases were up fractionally to 6⅝c. per pound, tankcars, delivered; house, 6⅜c., and brown, 5½c., same basis. Choice white grease, not all hog fat, continued nominal at 8⅛c. per pound, same basis.

Lard—The market closed stronger and up fractionally. Cash lard advanced to 17c. per pound, tierces, Chicago.

Tallow — Market was influenced by strengthened interest for export. Bleachable fancy was reported sold higher, at 7¾c. per pound, drums, f.a.s. prompt delivery, and extra, at 7⅜c., same basis. Domestic interest improved to some extent, with soapers interested in slightly higher offerings than previously.

Fish Oils

Refined Fish—Light cold pressed remained at 11½c. per pound, tankcars, New York. Consuming interest was still slow, with buyers preferring to purchase less carlot quantities. Firm bids for large lots could have shaded prices.

Asking price for new crop material was 7½c. per pound, tankcars, f.o.b. Atlantic and Gulf coasts, with buying interest around 7c. to 7¼c., same basis. Export inquiry remained moderately active, with bids ranging upward to 8½c. per pound, f.a.s., for nearby material.

Cake and Meal

Cottonseed Meal—Demand continued fairly good with mills not offering large quantities. Trading was carried on at a basis of $70 per ton, Memphis, $72 per ton, Alabama, $75 per ton, Georgia, $74 per ton, South Carolina and $75 per ton, North Carolina points for immediate February shipment, with 36 percent, sacked, $5 per ton less.

Linseed Meal—Prices advanced and held steady. Supplies were slightly easier, moving less rapidly.

Minneapolis.—Linseed meal prices held firm but buyers began to show some resistance at the higher levels. Supplies were a little harder to move than in recent weeks, crushers said. Extracted linseed meal, 36 percent protein, was priced at $70.50 a ton, bulk, car-

—*Continued on page 65*

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3—PFAUDLER GLASS LINED REACTION KETTLES; jacketed, 750, 200 gal. Each XP motor driven agitator.

6—750 gal. MONEL KETTLES, 6' dia. x 5' Jacketed, agitated, cone bottom, each with XP motor. Also 1—5' dia. x 6'9".

1—BAKER PERKINS "TER-MEER" CONTINUOUS ALL S/S CENTRIFUGAL, 12" basket, XP motor.

1—ALL MONEL ENZINGER FILTER; jacketed, 24" ID, 8 monel leaves.

2—Carrier Corp. Refrigeration for chilling water: 1—#5H-80-149 for 140,000 BTU/HR, 30 HP; 1—5H-60-149, 15 HP motor.

1—5' dia. x 9'6" Copper Vacuum Pan, C.I. jacket, also steam coils.

2—7' x 19' Horizontal Steel Welded Storage Tanks.

2—500 gal. jack. agit. Steel Kettles, XP motors.

1—Haveg column 24" dia. x 30" high.

1—All Steel packed column 24" dia. x 28' high.

Including many Condensers, Haveg pipe, XP motors, duriron & SS Pumps, etc.

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PROFIT MORE IN'54

IMMEDIATE SHIPMENT from HOBOKEN, N. J.

5—New vapor Condensers, 150 sq. ft. cupro nickel tubes.

2—New vapor Condensers, 220 sq. ft. aluminum brass tubes.

6—Continuous Centrifugals, solid bowl:
2—7" Lab. type, SA316 s/s.
1—7" Lab. type, SA316 s/s screen type.
1—18" SA316 s/s.
1—30" s/s contact parts, balance carbon steel.
1—36" Laughlin type.

2—Worthington Radial type Air Compressors, 6x6x5x5, V-belted to 30 H.P. AC motors.

PROFIT BY SAVING DOLLARS AND DAYS

1—42"x120" Buflovac double drum Dryers; other smaller sizes.

1—Sharples C-20 Super D-Hydrator.

1—6"x15' Sturtevant all steel Jaw Crusher.

1—Stainless Steel Link Belt Roto Louvre Rotary Dryer, #502-16, with motor reducer drive, Ross gas or oil furnace, exhausters, etc. Also #207-10.

1—Oliver 6'x6' Rotary Filter, acid proof.

1—Baker Perkins size 15 JUE, dbl. sigma blades, 100 gal. Mixer.

1—Day #30 Imperial dbl. sigma blade, jack. Mixer, 75 gal.

1—Swenson Walker Crystallizer 70', jacketed, 20' sections.

1—Shriver 42"x42" Iron Filter Press, plate & frame, 18 chambers, 1" cake.

12—Sperry 18"x18" Iron Filter Presses, 12 chambers.

4—Mikro Pulverizers, 4TH, 2S1, Bantam SH.

7—Pebble Mills, 800 gal., 6'x8'; 235 gal., 5'x4'; 125 gal.; 50 gal.; 25 gal.

1—6'6"x12' Rotary Granulator or Dryer.

3—3'x50' Rotary D. H. Dryers or Coolers.

3—Mojonnier S/S Vac. Pans, 3', 4', 6'.

3—Anco 4'x9' Chilling Rolls.

3—B & J Rotary Cutters, #2, #1.

PROFIT with this modern POLYVINYL ACETATE UNIT

Approx. 1000 lb. per hr. capacity of dry resin produced from a 50/50 water and granulated resin solution. Filtrate: Acetic Acid Solution. The solids leave centrifugal with 10% moisture content. Dryer Discharge—1%.

1—500 gal. s/s jacketed agitated Reaction Kettle with Reflux Condenser, 15 HP Explosion Proof Motor, Reeves variable speed transmission and Phila. gear reducer.
1—6' dia. x 15' long, s/s Continuous Rotary Resin Dryer.
1—Solid bowl all stainless steel Centrifugal 30" x 40", m.d.
2—500 gal. s/s Tanks. 1—250 gal. s/s Tank.
3—S/s Pumps, with 1½ HP Explosion Proof Motors.

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1—Shriver cast iron 42" x 42" open delivery filter press, 60 chambers with hydraulic closing device.

2—Sparkler Jacketed Filters Model 33-D-17 Type 316 Stainless Steel.

1—Niagara Stainless Steel Filter Model 136-40.

1—Sparkler Steel Jacketed Filter Model 33-D-7.

1—Sweetland #2 Stainless Steel Filter 16 sq. ft. filtering area.

1—Alsop Type 316 Stainless Steel Filter Model #12 NR-30.

5—Stainless Steel Condensers, 136 & 500 square feet.

1—"Struthers Wells" Hastelloy B Heat Exchanger, 450 sq. ft.

5—Alco Steel Heat Exchangers, 360 sq. ft.

1—Patterson Steel Chrome Magnesium lined jacketed Ball Mill, 2½' x 3' with 7½ HP Explosion proof gear motor.

1—Micro Stainless Steel Pulverizer, #2TH.

1—Sparkler 18D8 Stainless Steel Jacketed Filter.

1—Abbe Stainless Steel Rotary Cutter #OO.

1—Abbe Rotary Cutter #2.

2—Buflovak Vacuum Shelf Dryers, 20, shelves, double door.

2—J. P. Devine Vacuum Shelf Dryers, 12 shelves.

1—Link Belt Steel Roto Louvre Dryer, 7½' x 20'.

1—Tolhurst Solid Curb Stainless Steel Centrifuge with 26" perforated basket complete with 2/1 HP Explosion proof motor.

1—Fletcher Suspended Type Centrifuge with 40" Perforated Stainless Steel Basket.

2—Ellis 30" Stainless Steel Centrifuges with Perforated Baskets.

1—Sharples Type 316 Stainless Steel Super Dehydrator Model C-20.

1—Buflovak Type 347 Stainless Steel Rotary Vacuum Dryer, 5' x 20'.

1—Buflovak Vacuum double drum Dryer 24" x 36" Stainless Steel contact parts.

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3—SHARPLES P-16 Monel and stainless steel Pressurite Super Centrifuges.

1—TOLHURST 32" Suspended Centrifugal, rubber covered, perforated basket, motor driven.

1—BIRD 40" Suspended Centrifugal, stainless steel perforated basket, motor driven.

1—BIRD 40" Suspended Centrifugal with rubber covered imperforate basket, bottom discharge, motor driven.

1—Industrial Filter 304 sq. ft. rubber lined with 18 stainless steel leaves.

1—EIMCO 4'x5' Rotary Vacuum Filter.

1—#12 SWEETLAND FILTER with 36 stainless steel covered leaves.

1—#7 SWEETLAND FILTER with 27 leaves.

1—SHRIVER 36"x36" cast iron, Filter Press P&F 46 chambers, closed delivery.

1—SPERRY 42"x42" wood Filter Press P&F, 54 chambers, hydraulic closure.

3—PFAUDLER 1000, 500 and 350 gal. glass lined, jacketed, agitated Reactors.

1—2,800 gallon 6'x12' Storage Tank 316 stainless with steam coils.

1—HERSEY 3'x26' stainless steel Hot Air Rotary Dryer.

1—F. L. SMIDTH 4'x30' Rotary Kiln, ¾" shell, welded construction.

1—DEVINE 2'x4' Vacuum Drum Dryer, 316 S.S.

2—F. J. Stokes Rotary Vacuum Dryers, 3'x15' and 30"x8',

1—Double Drum Atmos. Dryer, 36"x84",

1—Link Belt 7'5"x20' Roto-Louvre Dryer, 316 SS.

2—Link Belt steel, 2'7"x10', 3'10"x16' Roto-Louvre Dryers.

1—Link Belt, Monel 2'7"x8' Roto-Louvre Dryer.

1—JEFFREY 30"x24" Type A, Hammer Mill with 30 HP motor.

1—#2 TH Stainless Steel Mikro Pulverizer.

1—WILLIAMS "SUPER TITAN" 5 Roll Mill.

1—RAYMOND 5 Roll High Side Mill.

2—HARDINGE 6'x22", 4½'x16" Conical steel lined Mills.

1—BAKER PERKINS 50 gallon, Type JEM, double arm, jacketed Mixer, 50 HP motor.

2—BAKER PERKINS 100, 50-gallon double arm, jacketed Mixers, Sigma Blades.

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2—#42 ROTEX SIFTERS, 40"x84" double deck Screens.

3—STOKES BB3 and B2 Rotary Tablet Machines.

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1—8000 gal. NEW Stainless Steel Tank, 7'8" dia. x 24'2" L.; 11 ga.

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30—Stainless Steel and Stainless Clad Steam Jacketed Kettles—40, 60, 80, 100, 150, 200, 500 gal.

2—450 gal. St. St. Jktd. Agit. closed Processing Kettles.

3—13 gal. Stainless Steel (T347) Jacketed Autoclaves or Pressure Vessels, 700# int. pr., 50 # jkt. pr.

1—Stainless Steel Pressure Vessel, 600# WP, T304, 18" dia. x 9'4" L. (86 gal.).

4—Aluminum Reaction Kettles, Jktd. and Agit., 35, 60, 100 & 250 gal.

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2—48" dia. Suspended Centrifugals Stainless Steel Perforated Basket, Bottom Discharge, AT&M & Bird.

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New Rotary Dryers. Kilns and Coolers

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10—Sperry and Shriver, 12", 18" 24" 30" 36" iron Filter Presses, also disc types.
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1—Abbe Pebble Mill, 24"x33". Jar Mills.
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1#00 Raymond Mill 30 H.P., complete.
?—#000 Raymond Mills
Buchanan 12"x12" Jaw Crusher.
Hammer Mills & Pulverizers, to 50 HP.
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2—Robinson 16" & 22" BB Attrition Mills.
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4—Lehman & Kent 3 Roll Steel Mills. 8"x22", 9"x32", 12"x30", 16"x40".
1—Monarch 9"x24" Steel Roller Mill, 3 pr. high. Also 7½x20, 4 Roll.
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1—Master Drum type 1000# Blender.
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4—Day 6, 15 & 40 gal. Pony Mixers.
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15—Portable Elec. Mixers, ¼ to 2 HP.
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1—St. Regis 100-lb. Bag Filling Machine.
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Reactors, steel, 4'x4', 3 & 5 H.P.
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Glass lined Kettle, 25 gal. Jkt. & Agtd.
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20—Jacketed Kettles—Stainless, Copper, Aluminum.
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1—Copper Evaporator, steam jacketed, 9'1"x3'9".
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Abbe Pebble & Tube Mill, 5'x22'—Burr-Stone Liner.
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45—Steel Tanks from 100 to 100,000 gals. both horizontal and vertical.
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Robinson Pulverizer #20, with 2 motors 10 HP each.
Robinson Ribbon Type Mixer, 30"x10'—like new.
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W. & P. type 3500 gal. Steam Jacketed, Double Arm Mixer.
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Baker Perkins BB, W. & P., Readco Heavy Duty 50, 100, 150 gal. Double Arm Mixer.
F. J. Stokes, J. H. Day, New Era, Hottman Mixers, from 1 to 450 gal., with and without Jackets, Single and Double Arm.
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Copper, Aluminum and S.S. Steam Jacketed Kettles.
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BINS—11,000 cu. ft.
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CENTRIFUGES—Steel, 26", 30", 40".
CENTRIFUGES—SS 40", 48".
CLASSIFIER—Duplex, Dorr 4'x20'.
COLUMNS—Steel, 6'x49'3"x⅜" bubble cap.
COMPRESSOR — 15½"x9"x10" 504 CFM 100#.
CONDENSER—1035 sq. ft. 4 pass, steel.
DIGESTER—3900 gal., jktd. & agit.
DRYERS—Steam tube, Louisville 6'x35'.
DRYERS—Rotary, Vacuum, 30"x8'; 5'x30'; 7'x20' (2).
DRYERS—Double Drum, 32"x90"; 36"x84"; 42"x120"; Single Drum 5'x6'.
DRYERS—Conveyor, 2'x28'; 16'x85'.
DUST COLLECTORS—4500 CFM, Steel & SS.
FEEDERS—Vibrating and Belt.
FILTERS — Rotary Vacuum, 11'6"x18'; 11'6"x14'; 8'x14'; 8'x12'; 8'x10'; 3'x4'.
FILTER PRESSES—42", 36", 30".
KETTLES & REACTORS—Stainless Steel, 3000 gal.; 525 gal.; 300 gal.
KETTLES & REACTORS—Steel, 2800 gal.; 1700 gal.; 1000 gal.; CI 1500 gal.
KILNS—3'x25'; 4'x30'; 5'x30'; 5'x67'; 7'x60'; 7'x160'; 8'x125'; 9'x80'.
MILLS—5-roll 50" Raymond; 10'x48" Ball; 6'x8' Ball; 36"x42" Pebble; #1 Raymond Imp.; Raymond #402 Bowl; Abbe B with Shaker; Williams #3.
MIXERS—Readco, Champion, Blystone, Ajax.
PACKAGING—Fillers, wrappers, labelers.
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DRYERS, ROTARY — 4½'x21', 6'x40', 5x40 Ruggles Coles XA.
PUMPS, VACUUM—Nash Hytor, AL 673 w/3 HP motor, H5/20 HP.
MIXERS—Lancaster Lab. P.C. Stokes, 13 gal.—W. & P. 80 gal.—Simpson 1½—all w/motors.
MILLS, HARDINGE—2' laboratory unit, 3'x8", 6'x22" Ball, 6'x22", 7'x48" Pebble.
CRUSHERS—JAW, 2x6, 9x15, 11x26.
MILLS, HAMMER — Wms. Reg. #1, GA 30, Jeffrey 24x30, w/motors.
PUMPS—Centrifugal, Rubber, Stainless & C.I. Viking 4" w/motors.

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2949—Ross No. 2 Double Arm Mixer; 16"x 12"x16" with 3 H.P. motor.
2337—W.&P. Type 100 Gal. Double Arm Jktd. Mixer; geared both ends.
3677/D1—Baker Perkins Size 17 BB Jktd. Mixer; 43½"x53"x44"; double arm; double geared.
3880—Simpson Intensive Muller Type Mixer; Size "O"; Model "C".
3668/S2—Lancaster Mix Muller No. 3 with Skip Hoist.
3427—Lancaster Mix Muller Model EAG 4, complete with all accessories.
2682—J. H. Day Jacketed (egg clipper) Mixer; 20"x22"x28".
2109—J. H. Day Jacketed Ribbon Mixer; 175 gal. 28"x26"x70".
2986/6—Savage 200-lb. Marshmallow Beater type Mixer.
3699—NEW steel double ribbon Mixers from 24 cu. ft. to 215 cu. ft.
3333—Sprout Waldron 283 cu. ft. Mixers; ribbon type; 5'x10'; center discharge.
3538—Wolf Ribbon Powder Mixer; 24"x32"x 94"; with 5 HP motor.
3102—J. H. Day 2,000 lb. Double Ribbon Mixer with top Sifter.
3427/P5—Marquette Paddle Type Mixer; 24"x 12' long, arr. for motor drive.
3505—Robinson Unique Stainless Powder Mixer with Sifter; 17"x30"x20"; 2 HP.
3781—Sprout Waldron STAINLESS Continuous Mixer; 28" dia. x 12' long.
3302—STAINLESS tumbling type Mixer; 5'x5' with 3 HP motor.
3350/F4—Fairfield Haines Screw Type Mixer; 40"x94" with gear reducer.
3748—NEW STAINLESS ribbon Mixers; 24 cu. ft. and 40 cu. ft.
3773—NEW STAINLESS JACKETED ribbon Mixers; 40 cu. ft., 32"x96".
3762/L7—Stainless Steel Mixing Tanks; 66"x 72"; S/S agitators; 1,000 gal.
3762/L5—Stainless Steel Mixing Tanks; 76"x 100"; S/S agitators 2000 gal.
3876/P1—Eppenback HI Speed 7000 RPM Homo Mixer; 1 HP Motor.
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3692/P 1—Heavy duty Post Mixers; with 6' shafts and cans.
666/W 7—A.T.&M. Rubber Churns, 300 gal., 3'x6'; XPL motors.
3733—J. H. Day 15 gal. and 40 gal. standard Pony Mixers.

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1—Shriver 24" lead filter press, 9—4" chambers.
2—Oliver 5'4" x 6' steel & wood continuous vac filters.
1—10" Airveyor system complete with motor and controls.
4—12" stainless screw conveyors, 9' to 30' long. NEW.
6—2500 gal. steel agtd. & coiled reaction kettles.
2—Pfaudler 800 gal. glass lined jacketed reactors.
3—750 gal. stainless 316 closed coiled and agitated reactors.
2—Blaw Knox 250 gal. jktd. & agtd. autoclaves, steel, 100# jkt. & 300 Psi internal.
1—Pfaudler 300 gal. glass lined jacketed reactor.
3—300 gal. stainless jktd. & coiled, and agitated processing kettles.
1—Rotex 20" x 48" bronze & steel sifter, single deck.
1—Rotex 40" x 84" steel sifter, single deck.
1—Ross 92" putty chaser, with 20 HP TEFC motor.
1—Hersey 3' x 25' monel rotary counter current drier.
1—Buflovak 24" x 48' stainless rotary vacuum drier.
5—Beaird Challenger 4' x 27' oil & gas fired driers.
1—Devine #26, 2 door vacuum shelf drier, 15 shelves.
2—Devine 17 & 13 shelf vacuum shelf driers.
1—Buflovak 3 effect monel evaporator, 150 sq. ft. per effect.
1—12,750 gal. stainless steel closed top coiled tank.

*All equipment owned by us.

What Have You for Sale?

CHEMICAL & PROCESS MACHINERY CORPORATION
146 GRAND ST. • NEW YORK 13
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Oils, Fats and Waxes

—Continued from page 62

lots, f.o.b., Minneapolis, for first half February shipment. Last half offers were quoted at $69 a ton, with March-April shipment at $68.50. Expeller meal was quoted around $73.50 a ton, bulk. Shipments against old contracts and for spot business continued good.

Shipments of linseed meal, in pounds, were as follows:—

	1953-54	1952-53
Past week	15,240,000	13,140,000
Since Sept. 1	310,950,000	293,240,000

Peanut Feed Meal — The government policy on releasing additional peanuts for crushing continued very indefinite, although private sources estimated that there would be small releases for several weeks to come. Supplies of peanut feed meal in the southeast continued ample, although there was no burdensome supply. Old process 45 percent sacked was offered at $77 per ton, basis Georgia points, and solvent production at $75 per ton f.o.b. southern Alabama for immediate through February shipment. Peanut meal was being used in greater volume by mills in the southeast, since its cost per unit of protein is cheaper than cottonseed meal or soybean meal.

Soybean Meal—Asking prices of soybean meal continued to advance, with buyers still purchasing mostly on a hand-to-mouth basis. February-March shipment, 44 percent bulk, was sold at $78.50 per ton, and $80 per ton, April-September, Decatur basis. Southeastern production supplies are small and prices are generally being figured on a Decatur basis.

Waxes

Carnauba—The market continued entirely nominal, with consumer interest remaining slow. No. 3 Ceara crude declined to 84c. to 86c. per pound. Refined was off, at 85c. to 87c. per pound, depending on seller and quantity. Crude Parnahyba declined to 87c. to 89c. per pound, while yellow No. 1 Ceara was off, offered at $1.18 to $1.20 per pound. Little or no interest in replacements was evident.

FOR SALE

Dryer: Louisville 14x72", stain. steel.
Filter: Oliver 1x1', type 316 stain. steel.
Hammer Mills: Williams, Mikro, Prater.
Vac. Drum Dryer: Devine 2x4', st. steel.
Heat Exchanger: Alberger 1500 sq. ft., s.s.
Mixer: Day 200 gal., sgl. arm, s.s.
Rotary Cutter: Ball & Jewell #1½, 20 hp.
Clarifier: De Laval 84-51 motor dr
Spray Dryer: Bowen 3,000,000 BTU per hr.
Press: Davenport 2-A, Durimet con.
Mills: Day Harris 18" st. steel.
Mixer: Simpson 36" Intensive.
Powder Mixers: 100 to 2,000 lbs.
Filter Presses: 7" to 24". Sperry, Shriver.
Mixer: Day 3-bbl. single arm, st. steel.
Colloid Mill: Premier 3" st. steel. 7½ hp.
Mill: Hardinge 36"x5' continuous.
Centrifugal: Tolhurst 32", rubber covered.
Evaporator: 40 sq. ft., type 316 stain. steel.

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1—B.P. 30 Gal. D.A. Jack. Mixer.
2—Vac. Shelf Dryers, 28 shelves, 59"x68".
2—Pfaudler Reactors, 100 and 500 Gals.
1—Blaw Knox 110 Gal. Autoclave, 2000 psi.
3—Sperry 24" C.I. Presses, 4 Eye—40 Ch. 2" cake.
2—Sperry 24" C.I. Presses 21 and 30 Ch.
1—Shriver 18" C.I. Jack. Filter Press.
1—Sweetland Filter #12—Brze. Leaves.
3—Rotex Sifters, 20"x48" to 40"x120".
3—Bubble Cap Columns, 27"x36" Alum.
1—Buflovak 6' Vac. Crystallizer.
1—Mikro 2TH Pulv. 15 H.P. motor.
1—Keeler 350 H.P. Boiler 160#.
2—Vert. 6,000 Gal. S.S. Tanks.
4—Rubber Lined Tanks, 42,000 Gals.

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Interested in buying small essential oil and perfume compound business. State particulars in letter. All replies confidential. No brokers. OPD 250.

Chemical Distributor launching expansion program seeks mineral, agricultural and chemical filler materials with industrial uses for distribution in Philadelphia and vicinity. Will purchase for own account and sell from Philadelphia warehouse. Give full details on products, distributor discounts and other pertinent information. Answers from principals only. OPD 255.

EQUIPMENT OFFERED

Heat Exchanger, unused. 100 sq. ft., 1 inch stainless steel tubes, 125 lbs. working pressure. Bargain. Charter 7-8000 New Brunswick, New Jersey.

For Sale Reeves 6x40' Rotary Dryer Rebuilt & reconditioned—35 h.p. electric motor—silent chain drive. Manley Brothers, 1050 Ogden Dunes, Gary, Indiana.

EQUIPMENT OFFERED

For Sale: Pfaudler 100 Gal. Glass Lined Reactor; Resina Model "S" and Model "LC" Canpers; Sperry 24" Cast Iron Filter Presses 2" Cake, Hyd. Closures; Devine 20 Shelf Vac. Dryer—H. Pearlman, 533 West B'way, New York 12, N. Y., GRamercy 5-6680.

High Speed Roller Mills Medium Speed Roller Mills, Pebble Mills, Pony Mixers, Change Can Mixers. We carry a complete line of rebuilt and guaranteed machinery. Write for list. Irving Barcan Co, 249 Orient Avenue, Jersey City 5, N J.

Glasslined and Lastiglas lined tanks, one-piece welded. Capacities from 85 barrel to 213 barrel. Bargain. E Keller, 2580 W. Davison, Detroit 6, Michigan. Townsend 9-6200.

EQUIPMENT WANTED

Chemical Equipment wanted for defense plant work including autoclave centrifuges, dryers, filters, kettles, mixers, pulverizers and tanks. Also interested in set-up plants, now operating or idle. Give full particulars in first letter for consideration. OPD 246.

Pilot Plant and full scale chemical plant equipment required for large expansion program. Kettles, columns, heat exchangers, tanks, mixers, dryers, centrifuges, pumps, filters, screens, pulverizers, etc. Stainless Steel alloy equipment preferred. Complete plants given immediate study. OPD 247.

Equipment Wanted. One Used Stainless Steel Underdriven Centrifugal Extractor, either 30 inch or 40 inch size. Two Type 316 Stainless Steel Vertical Tanks with conical bottoms, about 5 feet diameter 14 feet high, containing about 3000 U. S. Gallons. OPD 235.

EQUIPMENT WANTED

Equipment wanted: 500 to 1,000 gallon glass lined reactor with or without condensing unit. State condition and price. OPD 254.

Wanted—Send us your list of surplus or idle machinery. Interested in large capacity dry & wet Mixers Rotary and batch Dryers. Pulverizers, all kinds of Jacketed Kettles. Distilling apparatus. Filling and Packaging Units. Stainless steel and non-corrosive Tanks and Vessels. For 36 years we have been buying from single items to complete plants. Consolidated Products Co., Inc., Observer Highway and Bloomfield Street, Hoboken, New Jersey.

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Castor Oil. Offers solicited on 300 tons of Brazilian castor oil, first-class quality, scheduled for February shipment. Reply to OPD 253.

MATERIALS WANTED

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Don't dispose of surplus inventories without consulting us. Top dollar value given. Interested in Solvents, Resins, Waxes, By-Products, etc. All inquiries given prompt efficient action. Let us hear from you. OPD 252.

P.A.'s Eye View

—Continued from page 5

aluminum, carbide, zinc castings, coal, diamond powder, dry colors, electrical insulation, sugar, forgings, gasoline, glycols, lead, limestone, lumber, naphthalene, vegetable oils, scrap paper, phenol, plastics, pyridin, steel scrap, tool steel, textiles, cotton yarn, zinc.

Canada

Canadian members report further declines in production, to keep in balance with lower orders. The commodity price structure is stronger than in the United States. Inventories are being reduced about in line with the United States. Employment is holding better. Buying policy is being cut back to even shorter range than south of the border. Members reporting from Canada are still optimistic that 1954 will be a good year.

FDA Head Points Out

—Continued from page 5

torney of the Department of Justice, said it had become apparent, from the more recent trend of court decisions, that "the government will have to work harder to win those cases not involving danger or what has been traditionally accepted as adulteration."

Mr. Kleinfeld went on to say, "It is not new for a swing by the courts in one direction to be followed by a counterbalancing swing. This should not be particularly surprising, for presumably it is part and parcel of the changing political and economic pattern of the past few years. How long this new development will continue is a matter of speculation. This much seems true, however; further advances in the field of consumer protection will have to come, for some time at least, from specific action on the part of the congress."

N.Y. Paint Technicians Meet Feb. 4

The New York Paint and Varnish Production Club will hold its regular monthly meeting February 4 at the Brass Rail, 100 Park avenue, New York City. Edward J. Dunn, jr., will talk on "Moisture Resistance of Paint Films." Mr. Dunn is head of the physical measurements department of the National Lead Company's research laboratories. The talk will be illustrated with slides and will deal with the moisture resistance of paint films as one of the basic problems of the paint industry.

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Advertisers Index

Alan Wood Steel Co. 40
Albemarle Paper Mfg. Co. 60
Alco Manufacturing Co., Inc. 66
American Agricultural Chemical Co. 1
Ansul Chemical Co. 48
Armour & Company 10

Baird Chemical Corp. 48
Baker, H. J., & Bro. 62
Baker, J. T., Chemical Co. 1, 42
Barclay Chemical Co. 66
Bareco Oil Co. 36
Barrett Division 38
Bemis Bro. Bag Co. 40
Benzol Products Co. 54
Berkshire Chemicals, Inc. 49
Better Finishes & Coatings, Inc. 33
Bios Laboratories, Inc. 48
Blockson Chemical Co. 41
Bonewitz Laboratories, Inc. 33
Bower, Henry, Chemical Mfg. Co. 32
Bowman, Charles, & Co. 44
Brill Equipment Co. 63
Brode Corp., The 62

Capital City Products Co. 60
Carbide & Carbon Chemicals Co., Div., Union Carbide & Carbon Corp. 2, 46
Celanese Corp. of America, Chemical Div. 68
Chemical & Process Machinery Co. 65
Chemical Service Corp. 66
Chemical Solvents, C. P., Inc. 68
Chemsol, Incorporated 48
Chew, John A., Inc. 33
Church & Dwight Co., Inc. 29
Columbia Southern Chemical Corp. 29
Commercial Solvents Corp. 6
Connelly, Inc. 40
Consolidated Chemical Industries, Inc. 32
Consolidated Products Co., Inc. 63
Consulting Chemists and Engineers 37
Coupe, Robert A. 32
Crosby Forest Products Co. 58

Dicalite Division, Great Lakes Carbon Corp. 51
Distillation Products Industries, Div. of Eastman Kodak Co. 45
Dodge & Olcott, Inc. 56
Drew, E. F., & Co., Inc. 62
Dunkel, Paul A., & Co., Inc. 53
Du Pont de Nemours, E. I., & Co., Inc. 11, 47

Eastman Chemical Products, Inc. 13
Emery Industries, Inc. 61
Equipment Clearing House, Inc. 64
Esso Standard Oil Company 22

Fairmount Chemical Co., Inc. 40
Farber Products Co., Inc. 66
Felton Chemical Co., Inc. 57
Fezandie & Sperrle 41
Fine Organics, Inc. 68
First Machinery Corp. 65
Florasynth Laboratories, Inc. 55
Foote Mineral Co. 33
Fritzsche Brothers, Inc. 55

Gas Purifying Materials Co. 34
Gelb, R. & Sons, Inc. 63
General Biochemicals, Inc. 62
General Tire & Rubber Co. 32
Gray, William S., & Co. 1
Greeff, R. W., & Co. 47
Gross, A., & Company 62

Hardesty, W. C., Co. 61
Heat and Power Co., Inc. 65
Heyden Chemical Corp. 44
Hoffmann-La Roche, Inc. 27, 43
Hooker Electrochemical Co. 30
Hutchinson, D. W., & Co., Inc. 55

Industrial Chemical & Dye Co. 32
Industrial Raw Materials Corp. 68
Inland Steel Company 39
Innis, Speiden & Co. 30
International Minerals & Chemical Corp. 21

Kessler Chemical Co., Inc. 60
Koppers Company, Inc. 39

Lawler Company 65
Lever Brothers Company 44
Loeb, H., & Son 64
Loeb Equipment Supply Co. 65
Lucidol Corp. 48

Machinery & Equipment Co. 64
Machinery & Equipment Corp. 65
Magnus, Mabee & Reynard, Inc. 55
Mallinckrodt Chemical Works 8, 59
Mann Research Laboratories, Inc. 48
Manufacturers Products Co. 66
Marine Magnesium Products Corp. 51
Marshall Railway Equipment Corp. 65
Maschmeijer, A., Jr. 57
Matheson Coleman & Bell, Inc. 45
Mathieson Chemical Corporation 31
McKesson & Robbins, Inc. 47
McLaughlin-Gormley-King Co. 34
Meer Corporation 53
Mefford Chemical Co. 49
Merit Warehouse Corp. 66
Michigan Chemical Corp. 46, 49
Miel, George A., Co., Inc. 62
Mondial Trading Corp. 46
Mutchler Chemical Co., Inc. 51
Mutual Chemical Co. of America 41

National Chlorophyll & Chemical Co. 44
National Milk Sugar Co. 48
National Rosin Oil Products, Inc. 60
Neville Chemical Company 59
Newman Tallow & Soap Machinery Co. 65
Niagara Alkali Company 23
Norda Essential Oil & Chemical Co., Inc. 18

Ohio-Apex, Inc. 59
Orbis Products Corp. 57
Oronite Chemical Co. 29

Pacific Coast Borax Co. 1
Parsons-Plymouth, Inc., M. W. 60
Penick, S. B., & Co. 52
Pennsylvania Industrial Chem. Corp. 58
Pennsylvania Refining Company 36
Perry Equipment Corp. 64
Pfaltz & Bauer, Inc. 44
Phelps Dodge Refining Corp. 32
Pittsburgh Coke & Chemical Co. 40
Polak & Schwarz, Inc. 57
Potash Co of America 35
Prentiss Drug & Chemical Co., Inc. 52
Prior Chemical Corp. 1
Process Plants Service 64
Procter & Gamble 44
Purocaine, Inc. 45

Quaker State Oil Refining Corp. 49

Raney Catalyst Co. 35
Read, Chas. L., & Co., Inc. 32
Republic Steel Corp. 39
Richmond Mica Corp. 60
Richter, Gedeon, Pharmaceutical Products, Inc. 51
Rosenthal Bercow Co., Inc. 68
Roure-Dupont, Inc. 57

Sergeant, E. M., Pulp & Chemical Co. 60
Sharples Chemicals Inc. 1
Shell Chemical Corp. 19
Shell Oil Co., Inc. 36
Smith Chemical & Color Co., Inc. 67
Snell, Foster D., Inc. 35
Solvay Process Div., Allied Chemical & Dye Corp. 25
Spencer Chemical Co. 30
Stauffer Chemical Co. 31
Stein Equipment Co. 64
Sterwin Chemicals, Inc. 56
Strohmeyer & Arpe Co. 61
Sunkist Growers, Inc. 20
Synthetic Products Co. 60

Tar Residuals, Inc. 40
Tennessee Corporation 34
Terra Chemicals, Inc. 46
Todd, A. M., Co. 55
Tragacanth Importing Corp. 54
Truland Chemical & Engineering Co. 66
Turner, Joseph, & Co. 35

Ungerer & Company 56
Union Carbide & Carbon Corp., Carbide & Carbon Chemicals Co. Div. 2, 46
Union Standard Equipment Co. 64
U. S. Industrial Chemicals Co., Div. National Distillers Products Corp. 15
United States Potash Co., Inc. 34
U. S. Steel Products Division, U. S. Steel Corp. 17
United Sulphur Co. of Texas 35

van Ameringen-Haebler, Inc. 56
Verona Chemical Co. 56

Westvaco Chemical Div. 46
Will & Baumer Candle Co., Inc. 61
Williams, C. K., & Co. 59
Wilner Wood Products Co. 60
Wirz, A. H., Inc. 44
Wyandotte Chemicals Corp. 33

Zinsser & Co., Inc. 41

McKesson & Robbins Puts Doerr on Board of Directors

McKesson & Robbins, Inc., New York, has elected Charles D. Doerr a director. Mr. Doerr continues as vice-president in charge of personnel, a post he has held since 1945. Mr. Doerr has been with McKesson for twenty-two years. He served as manager of the company's wholesale drug divisions in St. Paul, Minn., Milwaukee, Wis., and San Diego, Calif., from 1932 to 1942.

Brownell Hails Record

—Continued from page 3

The committee's six study groups, at work for nearly four months, are due to complete their report before the fall, he indicated.

Touching on the department's approach to criminal antitrust cases, Mr. Brownell said, "Criminal proceedings will be limited to the obvious form of per se illegality. Thus, of ten criminal actions instituted from May to the end of 1953, all but one involved practices which courts had persistently held to be per se violations."

Assistant Attorney General Stanley N. Barnes, head of the Justice department's antitrust division, told the same meeting that the cases started by his unit "are based upon classic hard-core antitrust violations." He pointed out that this does not mean that the division "will not seek to extend the thrust of antitrust litigation when necessity demands such an extension to protect the basic principles inherent in antitrust."

He refuted recent criticisms that the department is continuing to hound American businessmen with a stream of criminal indictments. Mr. Barnes pointed out that since he assumed charge of the antitrust division, twenty-five antitrust actions have been filed—ten being civil, fourteen criminal and one both civil and criminal.

While conceding that the number of indictments may seem to outweigh the number of civil cases started, Mr. Barnes asserted that these criminal cases involved the clear-cut violations mentioned by Mr. Brownell. "With one exception," Mr. Barnes stated, "these criminal cases involved such violations as price fixing, allocation of territories or customers and boycotts."

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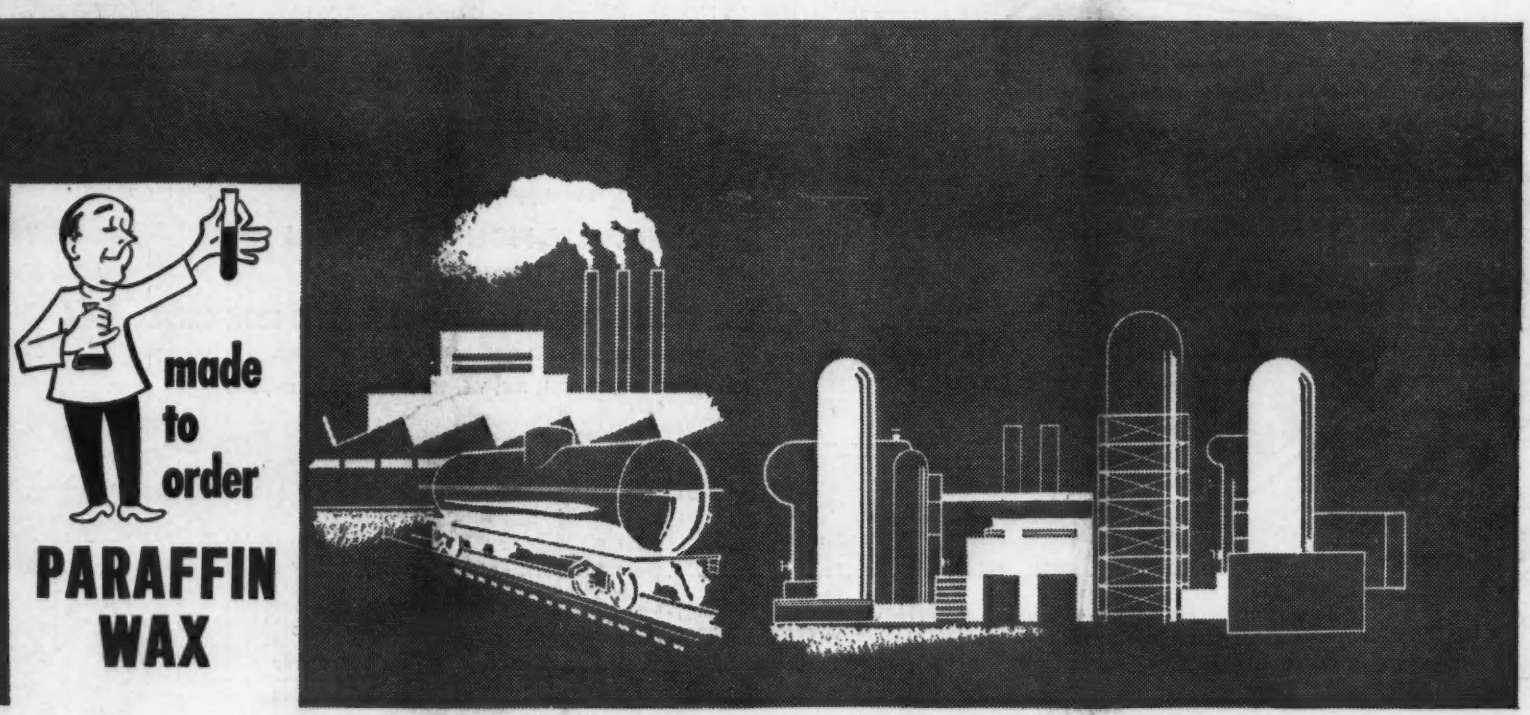

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The Chemical Market Authority Since 1871

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Contents of This Section

Chemical and Related Markets

Agricultural Chemicals..... 38
Botanical Drugs..... 42
Coal Chemicals..... 3
Drugs, Fine Chemicals..... 3
Essential Oils, Aromatics..... 44
Heavy Chemicals..... 3
Oils, Fats and Waxes..... 54
Petroleum Derivatives..... 48
Protective Coating Materials..... 50
Textile and Leather Chemicals..... 49
Chemicals, Oils and Drugs, Price Changes: 1953..... 9
Chemicals, Oils and Drugs Price Records: 1939-53..... 7
Washington Activities..... 5

Advertisers Index

Abood, George A., Co., Inc..... 47
Alan Wood Steel Co..... 47
Allied Asphalt & Mineral Corp..... 51
American Firstoline Corp..... 4
American Flange & Mfg. Co., Inc..... 15
Arapahoe Chemicals, Inc..... 41
Arapahoe Special Products, Inc..... 43
Archer-Daniels-Midland Co..... 54
Arista Oil Products Co..... 42
Austin Company, The..... 17

Barium & Chemicals, Inc..... 11
Bersworth Chemical Co..... 16
Buffalo Electro-Chemical Co., Inc..... 19

Carbide & Carbon Chemicals, Co., Div. Union Carbide & Carbon Corp..... 2
Cargill, Inc., Falk Division..... 25
Chemo-Puro Mfg. Corp..... 40
Cleveland Steel Barrel Co..... 49
Columbia Southern Chemical Corp..... 12
Crossett Chemical Co..... 37
Croton Chemical Corp..... 36

Davison Chemical Corp., The..... 21
Dickerson Company, Inc., The..... 38

Emery Industries, Inc..... 54
Enjay Company, Inc..... 26

Falk Division-Cargill, Inc..... 25
Filo Color & Chemical Corp..... 52
Fine Organics, Inc..... 40
First Machinery Corp..... 53
Florasynth Laboratories, Inc..... 44

Givaudan-Delawanna, Inc..... 45

Harshaw Chemical Co..... 24
Hercules Powder Co..... 53
Hoffmann-La Roche, Inc..... 1
Hollander, Herman, Inc..... 44
Hooker Electrochemical Co..... 31

Internatio-Rotterdam, Inc..... 55

Jefferson Chemical Co..... 18

Magnus, Mabee & Reynard, Inc..... 28, 29
Mantrose Corporation..... 51
Mathieson Chemical Corporation..... 27
Maywood Chemical Works..... 39, 45
McKesson & Robbins, Inc..... 39
Merck & Co., Inc..... 8
Metal & Thermit Corp..... 30

Neville Chemical Company..... 14
Newman Tallow & Soap Machinery Co..... 49

Parsons-Plymouth, Inc., M. W..... 52
Penick, S. B., & Co..... 6
Pennotex Oil Corp..... 48
Petroleum Specialties Inc..... 23
Petrolite Corp., Ltd., Wax Division..... 35
Philipp Brothers Chemicals, Inc..... 13
Polak's Frutal Works..... 46

Reichhold Chemicals, Inc..... 22
Rosenthal Bercow Co., Inc..... 37

Samuel, Frank, & Co., Inc..... 42
Sharples Chemicals Inc..... 10
Standard Brands, Inc..... 51
Sumner Chemical Co., Inc..... 41
Syntomatic Corp..... 46

Union Carbide & Carbon Corp., Carbide & Carbon Chemicals Co. Div..... 2

Velsicol Corp..... 50

Warwick Wax Company, Inc..... 32, 33
Wirz, A. H. Inc..... 34
Witco Chemical Company..... 20
Woudhuysen, H. L., & Assoc..... 36

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Chemical and Related Markets in 1953

Coal Chemicals

Nineteen hundred and fifty-three was a year which showed a change of tone along about its middle. It started out fairly well as an extenuation of the expansion period of the previous several years. Demand had soared in postwar years. Materials tightened up during the Korean conflict. Critical shortages developed and prices had to be rigidly controlled to keep mounting production costs and product prices in check.

Results of the long buildup began to make themselves felt last year. Sustained production at high levels finally alleviated many shortages. Coaltar chemicals which had long been in short supply became available to the consumer in 1953. Coke-oven operators and tar distillers expanded their production facilities.

Despite a downturn in the operation rate in the latter part of the year, the steel industry managed to set a new production record in 1953 by virtue of the extremely strong first half of the year. Output in 1953 totaled 111,500,000 tons of steel, 6 percent over 1951, the previous peak, and 20 percent more than 1952 production. Output in 1952 was reduced by the loss of production of 18,000,000 tons during a long steel strike (a factor which is important in explaining the high degree of activity in steel at the outset of 1953).

No Steel Stoppages in 1953

Total production in 1953 was also helped by the fact that there were virtually no major work stoppages in the industry during the year. Current capacity of domestic steel mills is 124,300,000 tons a year, compared with a potential of 117,547,470 net tons at the beginning of 1953. There has been a gain of 28 percent, or 25,600,000 tons since 1945.

Production of other coaltar chemicals and intermediates such as phthalic and maleic anhydrides, fumaric acid and phenol increased during the year. Demand for several of these items was greater than past production potential and, in some instances, a future market was indicated beyond present capacity. A striking illustration of how increased production facilities were rapidly closing the gap between current potential and future buying levels came during the past year. A major supplier's phthalic anhydride plant was shut down for nearly six months with a labor dispute and threatened to leave the market in extremely short supply. However, production from a new phthalic plant was made available and increased output of other phthalic facilities rose to meet the challenge. Supplies did tighten up a bit as consumers doubled up orders for protective measures. Nonetheless, a critical situation was avoided because the reserve production capacity was available.

Naphthalene Situation Outlined

Increased production capacity of naphthalene in recent years began to show its effect in that market early in 1953. Demand started out the year at a slow pace for crude material. The critical shortages of the periods of heavy buying had been overcome. However, this was one of the few markets to show an early recovery from critical shortages.

There were a few markets which continued to run in short supply at the start of the year due to heavy demand, and in part, because of the long steel strike of the previous year. Benzol started out the year with a strong demand. Momentum carried over from the previous quarter, following the steel shutdown, sustained activity in the early months of 1953. Insecticide production was not particularly good in the spring, but this was more than offset by a very high level of activity in the rubber industry. Since the rubber industry consumes a great deal of benzol through styrene and anilin, the general level for benzol was set at a good pace. A well sustained demand from synthetic phenol also helped.

Toluol and xylol moved in excellent volume at the beginning of the year, in fact all through 1953. Supplies were very short

—Continued on page 46

Chemical Plant Expansion Seen Topping Other Events of Year

The chemical industry's record of plant expansion in 1953 by far overshadowed any other single achievement of the year. This was the year which saw many important process developments at the commercial level. Of these, perhaps the most important was the boost given to phenol capacity via a cumene process, which involves the oxidation of cumene (isopropyl benzene)—obtained from benzene and propylene—to cumene hydroperoxide. This then is split into phenol and acetone. First employed by B. A. Shawinigan, Ltd., Montreal, Canada, the process was also adopted during the year by Hercules Powder Company and other American firms.

Also of interest during 1953 was a new non-electrolytic process for making hydrogen peroxide, installed commercially by E. I. duPont de Nemours & Co. at its Memphis, Tenn., plant. The process, which reduces and then oxidizes alkylated anthraquinones, gives the peroxide by means of solvent extraction. Because of its economic advantages, other makers at yearend were giving it careful consideration.

Manufacture of hydrazine by Matholin Corporation at Lake Charles, La., also ranks as one of the year's major events. Sodium hydrochlorite and ammonia were reacted by Matholin to form chloramine, which, in turn, was treated with more ammonia to form hydrazine. The dilute 2 percent solution was concentrated by means of azeotropic distillation. Rounding off the list of key events of 1953 is the development of a method by Buffalo Electro-Chemical Company for producing mercury acetate directly from the metal by reaction with peracetic acid.

Production facilities reaching the planning stage, under construction or completed during the year are listed below along with 1953's major research and marketing developments:—

Acrylic monomers—In February Rohm & Haas Company completed its $8,000,000 plant at Deer Park, Tex. The plant uses a reaction of acetylene with carbon monoxide and alcohol, induced with nickel carbonyl. The new process replaces the ethylene-based process.

Acrylonitrile—B. F. Goodrich Chemical Company revealed in May plans for its Calvert City, Ky., plant, and construction on the $8,500,000 facility got under way in July. (See also **Nitrogen products.**)

Adipic acid—Allied Chemical & Dye Corporation in August announced plans for a new plant at Hopewell, Va.

Alcohol — Certain fermentation producers went out of production during the year, and synthetic output increased. National Petro-Chemicals Corporation's annual capacity at its new Tuscola, Ill., plant is put at 40,000,000 gallons.

Alcohols, higher—In May Archer-Daniels-Midland Company reported that it intended to put up a plant to manufacture various higher alcohols at Ashtabula, Ohio.

Allyl chloride—As a first step in expanded synthetic glycerin production facilities, Shell Chemical Corporation started construction of a new plant for the production of allyl chloride and epichlorohydrin at Norco, La. This plant looks toward 25,000,000 pounds of additional synthetic glycerin annually, plus an expanded output of epoxy resins.

Alumina—Reynolds Metals Company's new $42,000,000 plant at La Quinta, Tex., on Corpus Christi Bay will turn out 1,000 tons per day of alumina.

Aluminum—A $21,000,000 metal producing plant was placed under construction by Reynolds Metals Company at Phoenix, Ariz. A certificate of necessity was issued March 19 to the Wheland Company for a $35,000,000 plant at Chattanooga, Tenn.

Aluminum fluoride—General Chemical Division of Allied Chemical and Dye Corporation opened a plant May 12 at Nichols, Calif., which will turn out 15,000 tons per day.

Ammonia—Nitrogen Division of Allied Chemical and Dye Corporation started construction June 16 of its anhydrous ammonia plant at La Platte, near Omaha, Neb., having an annual capacity of 75,000,000 tons. Grace Chemical Company in March announced plans for a $19,000,000 plant at Memphis, Tenn. In December

—Continued on page 52

Heavy Chemicals

Sales volume of heavy chemicals in 1953 compared favorably with the preceding year, according to producers. The year started off quietly with demand spotty, but became steady as the year progressed. With the exception of nickel salts, there was an absence of shortages and suppliers were able to meet requirements promptly in most instances. Anhydrous ammonia ran flush with demand during the first six months only to ease later when the agricultural demand subsided and stocks became available for spot shipment. Chlorine was a problem to producers during most of the year with production running ahead of requirements. Output was frequently cut back in an attempt to check the overflow and keep the market in balance. There were intervals when this reduction was reflected in the supply of caustic soda, although the scarcity never became serious.

OPS Removes Price Curbs

Realizing that most chemicals were in adequate supply, there was little disposition on the part of buyers to extend commitments beyond the limit of current requirements. This was reflected in the constant replenishment of inventories and, while individual sales were not unusually large, the volume was of satisfactory dimensions. Government controls were removed from tin in February and restrictions were lifted from fluorspar also. In March restrictions were taken off all chemicals by OPS except sulphur, sulphuric acid and a few other small chemicals, whose removal was slightly delayed. In April and May, price advances started and producers who had assumed accumulated increased costs of labor, freights and materials were at last given a break. Anhydrous ammonia seemed to lead the advance followed by the phosphates, aluminum sulphate, hydrochloric acid, dry caustic soda, soda ash and several other important chemical items.

The announcement of the advances beforehand brought in an avalanche of buying orders prior to the dates on which the new prices were made effective. July 1 was probably the date on which the majority of price changes took place. Buying interest lost its momentum in July and the market felt the influence of the vacation period. The slow demand for synthetic insecticides with cutback production of BHC and DDT placed quite a dent in the use of chlorine and caused a visible increase in the spot supply. The basic metals were heavy throughout the third quarter with lead and zinc prices slanting downward and tin taking a spectacular nose-dive. Copper did not vary much in price but antimony dropped sharply under foreign selling influences.

Demand Picks Up in Fall

The fall months occasioned a pickup in general demand without disturbing the favorable supply position. Soda ash, caustic soda and sulphuric acid sales expanded, although production of the latter appeared to have topped demand. Copper sulphate did not have a good year. Weather conditions favored planters and did not produce much bug infestation or blight. State highway commissions took on a lot of calcium chloride late in the year for ice control on highways. The general demand lasted well into December when buyers assumed their seasonal inventory conscious attitude and the buying movement fell off accordingly.

Spotty demand featured the heavy chemical market in January of 1953. Specialties commanded attention, particularly calcium chloride when sales for ice control were of sizable dimensions. Demand for soda ash, caustic soda and chlorine was slow and there was considerable backing up of stocks. It was necessary to cutback chlorine production to check the over-flow. Several of the metals were constantly under pressure and prices of lead, zinc and quicksilver declined with sales of the latter at $214 per flask. There was a pickup of sales in potassium carbonate toward the end of January, the de-

—Continued on page 37

Drugs and Fine Chemicals

Last year shapes up, in retrospect, as an overall good year for the drugs and fine chemicals industries. With the coming on scene of a new government administration, price ceiling controls were dropped early in March. This action was officially announced in General Overriding Regulation 44 which wiped away price controls on all but a handful of selected items.

Profit-wise, 1953 saw margins largely maintained or surpassed and many companies, both large and small, showed faith in the future by way of expansion of lines and facilities. There were at least two important drug company mergers in 1953 and some trade sources predicted others would take place in the future.

Industry Closes Year With Optimism

The drug industry, in general, concluded 1953 on an optimistic note. Sales for the year were expected to reach a higher level than in 1952 with most drug companies reporting earnings equal to or slightly exceeding those for 1952, despite continuation of the excess profits tax. Research remained as the major factor in the industry's growth as several new and important products moved out of the laboratory into successful application.

Growth in population, the increasing proportion of older people, broader health services, more doctors and medical facilities all tended to increase the market for drugs and medicines—an expansion which has become worldwide. Greater use of products of drug research in veterinary medicine, in animal husbandry and in agriculture proved an additional stimulus to the industry.

Aftermath of Price Decontrol

The lifting of price ceilings last spring was followed by a flurry of price advances, most of which were on small volume drug items. An advance in ethyl alcohol on April 1 was in no way related to the lifting of chemical price ceilings the month previous but was a reflection of the strength of the market at the time. Demand for industrial alcohol last year was quite good during the first and second quarters. The Reconstruction Finance Corporation in the first half of the year purchased sizable quantities of alcohol for use in government synthetic rubber plants in the manufacture of butadiene. The last purchase by RFC for this purpose was in April when 16,400,000 gallons were purchased from one fermentation alcohol producer. Subsequently, production was shut down in government alcohol plants

—Continued on page 39

Trend of Drug & Fine Chemical Prices

100=1949 Average

	1953 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	91.74	91.73	91.18	90.36	90.23	89.50	89.33	89.33	89.24	89.15	88.50	88.35
L.	91.73	91.28	90.38	90.23	89.56	89.30	89.30	89.23	89.22	88.53	88.49	88.35

	1952 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	101.01	100.58	99.24	98.10	97.91	97.91	96.35	95.77	95.75	92.88	93.00	92.82
L.	100.58	99.65	98.22	97.91	97.91	96.44	96.07	95.75	94.12	92.73	92.79	91.74

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Washington Climate Improves in 1953

Looking back over 1953, the developments that stand out above others of major importance were:—

¶ Reaching of a truce in the Korean fighting, but failure to arrive at a peace agreement that would ease the tensions of this part of the world.

¶ Assumption of governmental reins by the Republicans for the first time in twenty years and the start of a policy switch to provide business with a better Washington "climate."

¶ A general leveling off of business indexes and prices which brought an end to fears of inflation.

In between these three developments were a great many others of varied importance, such as the ending of price, wage and most materials controls; a resurgence of such domestic issues as taxes, tariffs and farm prices to the forefront of Washington considerations; a series of governmental reorganizations; legislation for controlling chemicals in foods, and cutbacks in government activities and payrolls.

Entering the new year, the "honeymoon" appears to be over and the President faces a rough session with congress in attempting to obtain approval of his legislative programs. Also, a business downturn developed in the last half of 1953 and is causing fears in some business quarters as the possible forerunner of a recession.

Government in Confused State

The start of 1953 found government machinery pretty much in a state of confusion awaiting the incoming administration on January 20. Price controls were still in effect, but were being revoked as rapidly as the areas could be surveyed and the decontrol orders drawn up; wage controls were largely a thing of the past; a few materials control orders remained, but these too were being revoked, and the petroleum industry was engaged in a bitter fight with the government over an alleged international cartel.

Upon taking office after his inauguration, Mr. Eisenhower appointed the following to his Cabinet:—John Foster Dulles as Secretary of State; Charles E. Wilson, Secretary of Defense; Robert Anderson, Secretary of Navy; Robert Stevens, Secretary of Army; Harold Talbott, Secretary of the Air Force; Ezra Taft Benson, Secretary of Agriculture; George M. Humphrey, Secretary of the Treasury; Sinclair Weeks, Secretary of Commerce; Douglas McKay, Secretary of the Interior; Martin Durkin, replaced later by James P. Mitchell, Secretary of Labor; Herbert Brownell, jr., Attorney General, and Arthur Summerfield, Postmaster General.

FSA Gets Cabinet Status

Two months after the President's inauguration, congress acted favorably on his request and elevated the Federal Security Agency to Cabinet level, and Mrs. Oveta Culp Hobby was named secretary. The law that converted FSA to the Department of Health, Education and Welfare also provided for an assistant to the secretary in charge of health. Dr. Chester Scott Keefer, physician-in-charge of the Boston Memorial Hospital, was appointed to this post.

Dr. Keefer's appointment was but one of a number of important developments of particular interest to the drug industry and the Food and Drug Administration. FDA and the industry also were concerned during the year with such matters as restoring authority to the agency to inspect foods, drugs and cosmetic plants; enforcement of the ban against the use of polyoxyethylene monostearate in baking of bread; legislative moves to control chemical additives in foods; efforts by the Bureau of Animal Industry to censor advertising of veterinary drugs; decertification of hazardous coaltar dyes, and certification of antibiotic products.

FDA Inspection Authority

As a result of the supreme court decision in the Cardiff case in December, 1952, President Eisenhower in his first state-of-the-union message asked congress to restore power to the FDA to inspect factories, but it was not until August that the law was finally enacted. In an effort to placate industry, Secretary Hobby insisted that the administration desired only to continue the enforcement program as it existed at the time of the Cardiff decision. Hearings were held by the house interstate commerce committee in May on several bills providing for compulsory inspection and after a long delay a bill was reported.

The committee report stated it was the intention of congress that the inspections be "reasonable." During debate in the house and later in the senate, congressional intent was clarified. Congress made it clear the inspections were not to include records, complaint files, etc. Later FDA issued instructions to inspectors that they may ask to see such records and files, but not to press the matter.

Chemicals in Foods Legislation

Four bills having to do with controlling the use of chemicals in foods and cosmetics were introduced in the house, and one of them, relating to pesticides, was introduced in the senate. They were the Delaney bills (H. R. 2244 and H. R. 2245) for controlling chemicals in cosmetics and foods and the Miller bills (H. R. 4277 and H. R. 4901) for controlling the use of chemical pesticides and chemicals in foods. Hearings were held on the pesticide bill where it received the strong endorsement of industry, but was opposed by FDA on several major grounds. The other bills never advanced beyond the introduction stage.

Other developments of concern to the drug industry during the year were:—FDA ruled out the use of antibiotics in foods; FDA decided that tetracycline was subject to the decertification requirements of the law; representatives of the antibiotic manufacturers met in December to map a campaign to end all antibiotic certification; distribution of gamma globulin was placed under control of the Office of Defense Mobilization to assure supplies for prevention of poliomyelitis; FDA began a study of the toxicity of boric acid baby powders, and FDA appropriations were cut some $200,000 to a total of $5,200,000 by congress.

Prices, Wages, Materials Curbs

Controls over prices and wages came to a statutory end on April 30 as congress was considering legislation to continue other sections of the defense production act. First action came in the senate where Sen. Homer Capehart of Indiana sponsored a standby controls bill that would have empowered the President to reimpose price and wage curbs when necessary for a period of ninety days while congress wrote permanent control legislation. The senate itself refused to go along on the proposal and the house flatly rejected it. The final outcome was passage of a bill continuing materials controls for two more years.

The extension law became effective July 1. On the same date the Controlled Materials Plan came to an end and was superseded by the Defense Materials System for allocating materials required for production and construction for defense. Operation of the plan was limited to steel, copper and aluminum. With the materials supply picture rapidly improving, ODM in September began a review of the production expansion goals set up early in the Korean mobilization program. In December the agency closed out 120 of the 237 goal programs and suspended issuance of tax certificates in forty-nine others. All of the strictly chemical industry goals were halted.

Stockpiling Program Reviewed

Meanwhile, a review of the stockpiling program also was understaken in September and orders were given to General Services Administration to reduce purchases of materials where the stockpile objective was nearly complete. In December further orders were issued to step up the buying of twenty-nine items, including aluminum, castor oil, nickel, opium and mercury. At the same time a committee of experts was set up to develop new and speedier processes for processing titanium ores. The aluminum supply situation was under review at the close of the year to determine whether to proceed with a proposed third round of expansion.

A number of important announcements and decisions came out of the Federal Trade Commission during the year after the Republicans finally obtained control of the agency. One of these, a reversal of official policy, favored industry pricing practices that include absorption of freight by sellers. In January the commission issued a cease-and-desist order against the lead pigment makers and, in February, it issued a complaint against the steel drum producers charging them with price fixing. The three major soap producers who had been under attack during the year were freed of price discrimination charges at the end of the year.

One of the most controversial subjects of the year was the question of tariffs and administration policy on foreign trade. Hints from administration quarters that the President favored a liberal policy on tariffs started a fight in congress to strip the President of discretionary authority to ignore recommendations of the Tariff Commission on escape clause actions.

Legislation to continue the trade agreements act for one year, repeal the President's discretionary authority, and enlarge the Tariff Commission to seven members was introduced and made the subject of hearings before the ways and means committee. The bill was widely supported by industry, including certain important sections of the chemical industry. However, the administration fought the high protectionist move with a counter proposal to have a commission study foreign trade policy while the trade law was extended for another year. This was coupled with a proposal for enlarging the commission and speeding up its investigations. The high protectionists capitulated and accepted the compromise, but the senate balked at enlarging the commission and this part of the plan had to be dropped.

Randall Commission Named

Shortly after the law was continued for a year, President Eisenhower set up the study commission under the direction of Clarence Randall, chairman of the board of Inland Steel Corporation, a low-tariff advocate. The commission held several days of public hearings, toured several of the European capitals and at the end of the year was writing its report which was made public last month (OPD, 1/25/54).

As another phase of the foreign policy matter, congress approved a customs simplication bill after stripping it of provisions which industry feared might open the way for increased imports. In recommending the bill, the administration agreed with the chemical industry not to repeal the American selling price basis of computing tariffs on coaltar products, but insisted upon certain other changes in the law with respect to computing values. The senate, however, yielded to industry demands and eliminated the valuation sections from the bill. In the interest of getting a bill enacted into law, the house accepted the senate amendments, but promptly included the disputed provisions in a separate bill, passed it and sent it to the senate where it now remains.

Meanwhile, the lead and zinc mining industry, feeling the effects of imports, petitioned the Tariff Commission for an investigation under the escape clause. At the same time, the senate and house committee adopted resolutions instructing the commission to investigate imports of the two metals and their effects on domestic output and report back by March 31, 1954.

Justice Dept. Activities

The most conspicuous efforts to change the "Washington climate" for business were those made during the year by Secretary of Commerce Weeks. However, industry soon found out in its contacts with Department of Justice that the antitrust laws were not being shelved by the Eisenhower administration and that this administration would demand their observance just as did the previous administrations. Examples of this policy were the decisions to proceed against the major oil companies with cartel charges which had earlier been drawn up by the Truman administration; continued prosecution of the antitrust suit against the duPont family, and refusal of the Justice department to sanction Secretary Weeks' plan for industry councils.

Secretary Weeks entered into conferences with industry leaders early in March with the view of reorganizing and rebuilding the prestige of the Department of Commerce. He proposed to set up industry councils presided over by industry people with headquarters in Washington to advise the government, through the Department of Commerce, of industry's viewpoint on various matters. The Department of Justice turned thumbs down on the council plan and finally in June, Mr. Weeks reorganized the department to set up the Business and Defense Services Administration with twenty-five commodity divisions. Charles Honeywell was named BDSA administrator.

BDSA Replaces NPA

The reorganization combined the rubber division and the chemical division of the old National Production Authority into a single division, with Norman Hathaway of the Davison Chemical Corporation, Baltimore, Md., as director. In the reorganization, the size of the combined division shrunk from a staff of 187 members during the height of the mobilization campaign to a staff of thirty-two members at the present time. Mr. Hathaway immediately set out on a program of providing industry with more information on distribution of chemicals and at the end of the year had launched a program of publicizing the end-use patterns of about thirty chemicals. Benzene was the first product covered with sulphur, sulphuric acid and nitrogen the next in line to have their end-use patterns mapped.

Aside from the government's attack on the alleged international oil cartel, the other important oil industry developments of the year was the fight over the tidelands. Carrying out a promise made during the campaign, President Eisenhower recommended early to congress that it pass legislation to return title to the tidelands back to the states. A bitter fight followed, but the legislation was finally enacted into law in May giving the states control over the submerged lands seaward for a distance of three miles, except for Texas, Louisiana and western Florida, whose historical boundaries extended ten and one-half miles into the Gulf.

Tidelands Issue Still Unsettled

Passage of the bill, however, failed to settle the issue because in September the state of Arkansas filed a petition in the supreme court seeking to upset the law. Arkansas argued that the royalties from oil produced from the tidelands belong to all the people and congress could not allot these funds to the coastal states. Alabama also sought to bring suit on the ground that extending the boundaries of Texas, Louisiana and Florida ten and one-half miles into the Gulf while boundaries of other states extend only three miles seaward, had the effect of making Alabama's sovereignty inferior to its neighboring states. Late in December, Rhode Island also sought the right to bring suit against the tidelands law.

As a part of the matter of clearing up the tidelands issue, congress followed up with the passage of a bill to permit development of the resources of the continental shelf, which the tidelands bill reserved to the federal government. Provision was made in the legislation for issuance of leases for development of the oil resources under the supervision of the Department of the Interior. The royalty on oil and gas produced on the shelf was fixed in the law at 12½ percent. At the request of the chemical industry, specific provision was included for issuance of sulphur leases, with royalties on the production of this mineral fixed at 5 percent.

Other Highlights of Year

Among the other highlights of the year were the following:—

Congress extended the export control law for three years to July 1, 1956. . . . Suit of Interhandel, Swiss holding company, to gain control of General Aniline & Film Corporation was dismissed by the United States Court for District of Columbia when firm failed to produce required documents proving ownership. . . . World Health Organization procedures for selecting international non-proprietary drug names were revamped after sharp attacks by US drug manufacturers.

Congress passed legislation calling for disposal of synthetic rubber plants and special three-man commission, named to handle sale, asked for bids by May 27, 1954. . . . World sulphur allocation was ended March 1 by the International Materials Conference; curbs on nickel, tungsten and other metals died later in the year, and IMC itself went out of business on December 31. . . . Reorganization plans for the Department of Agriculture and the Office of Defense Mobilization, routed to congress, were approved by the lawmakers.

Congress provided for another Hoover Commission study on governmental reorganization, this time giving the group power to recommend elimination of functions as well as consolidations. . . . Census bureau had to abandon plans for a census of business and manufactures when congress refused to grant the necessary funds. . . . Navy output of paints was cut back, largely as a result of protests from the National Paint, Varnish and Lacquer Association. . . . Attorney General Brownell setup special study group on antitrust laws. . . . Congress voted to end lending operations of Reconstruction Finance Corporation. . . . Government research on synthetic liquid fuel from coal was ended and Louisiana, Mo., plant was put up for sale by army. . . . FTC chairman Edward F. Howrey ordered complete overhaul of agency's enforcement machinery.

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Deciphered hieroglyphs from excavated bas reliefs reveal that over 300 botanical drugs were known 5000 years ago in ancient Babylo-Assyria; some are *still* in common use. The Sumerian Tablet shown here lists a typical group of these botanicals, together with directions for preparing their extracts, among other details. True, a far cry from the advanced procedures of today – but still the beginning of progress along these lines.

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Chemicals, Oils and Drugs Price Record

Heavy Industrial Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Acid, acetic, glac., 99.5%..	$3.50	$3.00	$6.93	$6.25	$8.12	$7.62	$9.00	$9.00	$9.00	$9.00
Chromic, 99%	.15¼	.15¼	.16¼	.16¼	.21¾	.20	.28	.27	.27½	.27
Formic, 90%	.10½	.10½	.10½	.10½	.13	.12½	.17	.142	.16¼	.14¾
Muriatic, 18°	1.15	1.15	1.15	1.15	1.70	1.50	2.80	2.45	2.50	2.45
Nitric, 36°	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.25	5.00
Oxalic	.10¾	.10¾	.11¼	.11¼	.13½	.13	.1590	.1575	.16½	.15¾
Sulphuric, 66°	16.50	16.50	16.50	16.50	16.50	15.00	20.00	20.00	22.35	19.61
Tannic, tech	.40	.40	.71	.71	.69	.69	.95	.95	.95	.95
Alum, ammonia, gran	3.50	3.15	4.00	4.00	4.00	4.00	3.80	3.80	4.30	3.80
Aluminum sulphate, com	1.15	1.15	1.15	1.15	1.30	1.15	1.63	1.65	1.85	1.65
Ammonia, anhyd., com	.04½	.04½	.05	.05	.03075	.03075	.0395	.041	.044	.04375
Arsenic, white	.03	.03	.04	.04	.06	.06	.05½	.05½	.05½	.05½
Barium chloride, tech	77.00	77.00	77.00	77.00	85.00	80.00	152.00	152.00	158.00	152.00
Bleaching powder	2.00	2.00	2.50	2.23	3.75	2.75	6.00	5.02	5.02	5.02
Calcium arsenate	.06½	.06½	.07	.06½	.09½	.09	.11	.10	.10	.09
Chloride, flake	22.00	22.00	18.50	18.50	22.00	18.50	25.00	25.00	27.00	25.00
Chlorine, liquid	2.00	1.75	1.75	1.75	2.25	2.00	2.70	2.70	2.93	2.70
Cobalt, oxide, black	1.84	1.67	1.84	1.84	1.27½	1.16	1.76	1.76	1.96	1.76
Copper, carbonate	.169	.14	.19½	.18	.26	.24	.23½	.22	.263	.235
Sulphate, 99%	4.75	4.10	5.15	5.15	7.60	7.10	8.95	8.95	10.85	10.35
Copperas	16.00	14.00	14.00	14.00	14.00	14.00	28.50	28.50	34.50	28.50
Epsom salt, tech	1.80	1.80	1.80	1.80	2.30	2.05	2.15	2.15	2.15	2.15
Glauber's salt, dom	.95	.95	1.05	1.05	1.75	1.25	2.25	2.25	2.35	2.25
Lead acetate, wh. brok	.11	.10	.12½	.12	.18½	.17	.25	.23	.23	.23
Arsenate	.11	.10	.11	.09	.21¾	.20	.30	.27½	.27½	.27¼
Magnesia, cal., tech	.26	.26	.26	.26	.33	.29	.32	.32	.32	.32
Magnesium chloride	32.00	32.00	32.00	32.00	40.00	37.00	51.00	49.00	51.00	50.00
Nickel salt	.13	.13	.13	.13	.14½	.14	.26¼	.26¼	.29	.26¼
Phosphorous, red, export	.40	.40	.40	.40	.44	.40	.56	.42	.46	.42
Potash caustic, solid	.06¼	.03¼	.06¼	.06¼	.07¼	.06¾	.079	.079	.087	.079
Potassium carbonate, cal	.05½	.06½	.06½	.06½	.07½	.07¼	.0825	.0825	.09	.0825
Chlorate, powd	.10	.08½	.09¾	.09¾	.11½	.09	.10¼	.10¼	.10¾	.10¼
Saltpeter, gran	6.50	6.50	8.20	8.20	8.20	8.20	9.75	9.75	9.75	9.75
Soda ash, 58%, light	1.05	1.05	1.05	1.05	1.30	1.20	1.50	1.50	1.65	1.50
Caustic, solid	2.30	2.30	2.30	2.30	2.85	2.50	3.35	3.35	3.70	3.35
Sodium chlorate, dom	.06¼	.06¼	.06¼	.06¼	.07¼	.06¾	.08½	.08¼	.08¾	.08¼
Phosphate, tribas	2.25	2.00	2.70	2.70	3.50	2.70	4.45	4.45	4.45	4.20
Silicofluoride	.05¾	.04	.12	.05	.07½	.06¼	.07	.05	.07	.07
Sulphur, crude, mines	16.00	16.00	16.00	16.00	18.00	16.00	22.00	21.00	26.50	22.00
Tin, crystals	.40	.36½	.39	.39	.92	.72	.80¾	.71½	.84½	.71½

Coal Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Acid, benzoic, tech	.43	.43	.43	.43	.43	.43	.42½	.42½	.44	.42½
Cresylic, high-boil	.68	.49	.81	.81	1.42	.90	1.20	.90	.90	.90
Sulphanilic, tech	.17	.17	.17	.17	.17	.17	.18	.18	.19	.18
Tobias	.65	.55	.55	.55	.62	.60	.74	.74	.74	.74
Alphanaphthylamine	.32	.32	.32	.32	.35	.35	.45	.45	.50	.45
Anilin oil	.15	.15	.15	.15	.13	.11	.18	.18	.20	.18
Benzol	.16	.16	.15	.15	.21½	.17	.30*	.30*	.40*	.30*
Creosote oil, crude	.13½	.13½	.15½	.15½	.19½	.17	.20	.20	.22	.20
Dinitrobenzene	.18	.18	.18	.18	.18	.16	.20	.20	.20	.20
Dinitrophenol	.22	.22	.22	.22	.22	.22	.34	.34	.37	.34
Diphenylguanidin	.35	.35	.35	.35	.35	.35	.44½	.43	.48	.44½
Naphthalene, crude, dom., 78°	.0225	.0225	.0275	.0250	.0450	.0350	.0675	.0675	.0675	.05
Nitrobenzene	.07	.07	.07	.07	.07½	.07	.09½	.09½	.11	.09½
Paradichlorobenzene	.11	.11	.11	.11	.12½	.11	.14½	.14½	.16½	.14½
Phenol, USP	.14½	.13	.12½	.12½	.11½	.10½	.19¼	.18	.18	.16
Phthalic anhydride	.14½	.14½	.14½	.14½	.17½	.14½	.22	.21½	.21½	.19½
Resorcinol, tech	.75	.75	.68	.68	.68	.68	.82½	.82½	.82½	.77½
Tar acid oil, 15%	.22	.21	.27½	.27½	.43	.26½	.40	.39	.39	.39
Toluol, pure	.30	.27	.33	.33	.30	.23	.30*	.30*	.32*	.30*
Xylidin, mixed	.35	.35	.35	.35	.38	.35	.39	.39	.39	.39
Xylol, com	.27	.26	.27	.27	.30	.25	.30*	.30*	.32*	.30*

* F.o.b. Pittsburgh district.

Dyestuffs and Tanstuffs, Textile and Leather Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Albumen, egg, edible	.75	.60	1.80	1.73	3.00	1.70	2.61	1.41	2.62	2.19
Annatto seed	.07½	.06½	.06½	.06	.19	.14	.26	.22	.26	.24
Chestnut ext., liquid	.01⅝	.01⅝	.02¾	.02¼	.0435	.0435	.0510	.0510	.0530	.0510
Cochineal, gray	.37	.35	.37	.37	.67	.65	.90	.68	.90	.68
Cutch	.04¼	.04	.05¼	.04¾	.12	.12	.08¼	.08	.08½	.08
Dextrin, corn, white	3.50	3.30	4.00	3.95	8.09	5.19	.0868	.0848	.0853	.0853
Egg yolk, dried, dom	.67	.59	1.00	.87	1.30	1.15	1.24	.95	1.48	.95
Fustic ext., cryst., No. 1	.24	.22	.24	.16	.42½	.41	.42½	.42½	.42½	.42½
Hydrogen peroxide, 35%	.20	.20	.16	.16	.15½	.15½	.2080	.2030	.2010	.2010
Indigo, synth., 20% paste	.16½	.16½	.16½	.16½	.16½	.16½	.28	.28	.31	.28
Logwood ext., liq., No. 1	.10½	.09½	.12½	.12½	.18½	.18	.18½	.18½	.18½	.16½
Nutgalls, Aleppo	.29	.23	No price		.52	.50	.38	.38	.38	.38
Potassium bichromate	.08⅞	.08⅞	.09⅝	.09⅝	.11½	.10¾	.14¾	.14½	.15	.14½
Quebracho ext., liq., 35%	.03½	.02⅞	.05¾	.04½	.07½	.06	.08¼	.08¼	.08¼	.08¼
Sago flour, raw	.04	.02½	.05	.04½	.09½	.07	.07½	.07	.07¾	.07
Sodium bichromate	.06⅞	.05⅞	.07⅜	.07⅜	.09	.08¾	.11¼	.11	.11½	.11
Hydrosulphite	.16	.16	.17	.17	.19	.18½	.25½	.24½	.24½	.23
Starch, corn, pearl, 100 lbs.	2.65	2.45	3.10	3.10	7.02	4.07	7.29	7.09	7.14	7.14
Valonia cups	39.00	30.00	No price		58.00	53.00	70.00	64.00	104.00	100.00

Oils, Fats, and Waxes

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Acid, stearic, dble pressed	.12½	.10	.1500	.1400	.38	.23	.12½	.11	.12¾	.11
Degras, common	.10	.07	.12½	.08¾	.12	.10	.12	.11	.17	.11
Oil, castor, No. 3	.11½	.07½	.13	.12¾	.33¼	.27½	.33¾	.25¾	.25¾	.16¾
Coconut, crude, Pac. Coast	.05⅝	.02½	.0950	.0835	.26	.11	.16	.07½	.20¾	.13¾
Cod, Newf	.72	.32	.90	.78	.24	.20	.14	.10	.10	.09½
Corn, crude	.07⅛	.04⅞	.12¾	.12	.37	.16	.15	.10¾	.15½	.13⅜
Cottonseed, crude	.06⅜	.04¼	.12¾	.12½	.37	.16	.14⅜	.10¼	.15¼	.12¾
Linseed, raw, N. Y	.1020	.078	.136	.106	.385	.2910	.20	.1593	.1745	.1445
Menhaden, crude, Balto	.36	.21	.666	.60	.23	.14	.09	.06	.07½	.06
Oleo, extra	.12	.08	.19¾	.13¼	No stocks		.20	.11½	.19	.10½
Palm	.05	.03¾	.09¼	.09	No stocks		.18¾	.11¼	.1270	.11½
Peanut, crude	.07¼	.05⅛	.13	.13	.37	.19½	.26½	.12¼	.26½	.16¼
Red, single, dist	.06½	.06¼	.1245	.1100	.32¾	.17¾	.12¼	.10¾	.12	.10¼
Sardine, crude	.38	.22	.66½	.60	.25	.18	No stocks		No stocks	
Soybean, crude	.0650	.0450	.12½	.11¾	.34	.15¼	.13⅜	.08⅞	.13⅞	.10
Tung, imp	.25	.14	.3885	.34¾	.38	.21	.42	.32¾	.31½	.23½
Tallow, extra, loose	.07	.04⅜	.0971¼	.0862⅝	.26¾	.11¾	.07¼	.05	.06¾	.03⅞
Wax, bees, crude, Afr	.29	.27	.49	.37½	.59	.45	.60	.44	.51	.45
Candelilla, crude	.18½	.15½	.38	.33	.76	.62	.77	.75	.76	.74
Carnauba, No. 3, N.C., cr.	.48	.28¾	.79	.73½	1.58	.73	.98	.89	1.14	.87
Spermaceti, blocks	.22	.18	.26	.24	.50	.44	.27	.24	.28	.25½

Fertilizer Materials

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Ammonium sulphate, dom.	28.00	28.00	28.20	23.00	38.00	28.20	49.50	40.00	49.50	44.00
Phosphate rock, Fla., 70-68%	1.90	1.90	2.20	2.20	3.49	2.60	4.40	4.35	4.88	4.40
Potash manure salt, dom. Muriate, 60%	.58½ .53½	.58½ .53½	.60 .53½	.60 .53½	.20* .53½*	.20* .37½*	.21* .43*	.21* .42*	.21* .43*	.21* .43*
Sodium nitrate, crude, dom.	27.00	27.00	27.00	27.00	40.50	35.00	51.00	51.00	51.00	47.00
Superphosphate, pile	8.50	7.50	10.24	9.60	13.68	12.60	17.20	16.40	18.20	17.20
Urea, dom., 46%	95.00	95.00	65.00	80.00	73.00	68.00	110.00	110.00	120.00	110.00

* F.o.b. N.M. mines.

Paint, Varnish and Lacquer Materials

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Acetone, CP	.06	.04½	.10	.08½	.08	.07	.08½	.08½	.08½	.08½
Alcohol, butyl, norm	.09	.07	.15¼	.13½	.35	.25	.18¼	.13	.13	.13
Denatured, SD1	.22½	.19½	.53	.53	.98½	.82½	.57½	.43	.45½	.43
Amyl acetate, ex fusel	.12½	.09½	.14½	.14½	.27	.24	.18	.15	.17	.15
Barytes, dom., floated	31.50	31.50	27.65	27.65	33.30	31.10	37.60	37.60	37.60	25.00
Black, carbon, standard	.0375	.0375	.03625	.03625	.075	.074	.10	.10	.12	.10
Blue, Prussian	.36	.33	.36	.36	.42	.42	.48	.48	.48	.39½
Brown, sienna, Amer., burnt	.03¼	.03	.03¾	.03½	.08	.05	.04¼	.04¼	.04½	.04¼
Calcium carbonate, air-floated, 325 mesh	12.00	12.00	18.00	18.00	10.50	10.00	6.00	6.00	7.50	7.50
Casein, domestic	.20	.07	.31	.14	.34	.24½	.34	.28	.28	.19¾
Cellulose, acetate, flake	.36	.35	.30	.30	.36	.36	.43	.40	.43	.41
Ethyl acetate, 85%	.06½	.051	.12	.12	.19	.18	.13	.11	.11	.11
Green, chrome, to 5%	.21	.21	.23¼	.23	.32	.20	.38	.35	.38	.35
Gum, copal, Congo	.49½	.34¾	.49½	.49½	.28	.25	.25	.21	.21	.19
Dammar, Bat., A E	.13¾	.11⅞	.25¾	.25¾	.35	.29	.25	.23	.27	.23
Ester	.08½	.06	.09½	.08½	.16¾	.13	.16	.14	.16	.14
Lead, red, 95%, dry	.0810	.0735	.09¼	.086	.176	.15¾	.2155	.1625	.1625	.16
White, basic, carb	.07	.07	.08½	.07¾	.16	.14	.2010	.1625	.1625	.16
Litharge, common	.0710	.0635	.08¾	.070	.1660	.74	.2065	.1525	.15½	.15¼
Lithopone, ordinary	.04⅛	.0375	.04¼	.04¼	.06	.05	.079	.075	.07½	.07½
Nitrocellulose, a/s	.28	.28	.28	.28	.32	.28	.45	.45	.43	.43
Red, Indian, pure	.08¾	.08¾	.09¼	.09¼	.10¼	.09	.12½	.12½	.12¾	.12½
Rosin, gum, F	6.60	5.35	4.14	3.27	9.65	6.73	9.30	7.14	7.81	7.20
Shellac, T. N	.19	.19½	.34	.31	.68	.60	.48	.45	.38	.33
Titanium dioxide, reg	.14	.13	.14½	.14½	.17½	.15½	.21	.21	.22½	.21
Turpentine, gum	.34½	.28½	.82½	.69	1.25	.52	.88½	.60	59	.56
Yellow, chrome, CP	.14½	.13½	.16½	.16	.27	.24	.32	.29¼	.37	.31
Zinc oxide, lead-free	.06¼	.06¼	.07¼	.07¼	.10	.09	.176	.1425	.14¼	.13½
Searate, tech	.23	.20	.31	.30	.51	.48	.41	.37	.38	.38

Drugs and Fine Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Acetanilide, USP	.30	.30	.34	.30	.40	.40	.61	.56	.80	.61
Acid, acetylsalicylic, USP	.50	.40	.40	.40	.45	.45	.55	.55	.55	.53
Boric, gran., tech	96.00	96.00	99.50	95.50	99.00	99.00	91.75	91.75	94.25	91.75
Citric, gran	.22	.20	.20	.20	.25	.20	.24½	.24½	.27	.24½
Phosphoric, NF, 85%	.12	.12	.10½	.10½	.10½	.10½	.08	.08	.08½	.08
Tartaric, USP	.31¼	.27¼	.70½	.70½	.54½	.45½	.45½	.37	.37	.37
Agar, No. 1	1.50	.90	4.75	3.50	3.85	2.75	2.25	1.25	2.50	2.25
Atropine sulphate	4.00	2.50	21.00	18.75	8.90	7.35	5.75	5.25	4.50	4.00
Bismuth subnitrate	1.48	1.33	1.20	1.20	2.15	2.00	2.65	2.65	2.65	2.65
Bromine, purif	.30	.30	.25	.25	.21	.21	.25	.25	.27	.25
Caffeine, natural	2.20	2.20	2.60	2.60	4.25	3.75	5.25	3.50	3.30	2.80
Synthetic	No prices		No prices		No prices		3.30	3.30	3.30	2.30
Camphor, nat., tabs	.82	.53½	1.60	1.60	No stocks		.69	.63	.63	.63
Synth. ,tabs	.68	.68	.82	.79½	.94	.83	.93	.90	.90	.90
Chloroform, tech	.20	.20	.20	.20	.20	.20	.17	.17	.17	.17
Corrosive sublimate	1.99	1.05	2.24	2.24	1.92	153	3.68	3.68	3.68	3.68
Cream tartar	.25¼	.22¼	.57½	.57½	.57½	.38½	.39½	.32	.32	.32
Formaldehyde	.05¾	.05⅜	.03½	.05½	.0370	.0320	.042	.0395	.0395	.0395
Glycerin, USP	.12¼	.12¼	.18	.18	.55	.39¼	.44¼	.34	.44	.33
Hexamethylenetetramine, tech.	.35	.32	.32	.32	.28	.24	.232	.232	.232	.232
Iodine, resub	2.00	1.75	2.00	2.00	2.85	2.10	2.55	2.55	2.80	2.55
Menthol, natural	3.35	2.90	14.00	13.00	9.20	7.20	8.75	5.00	6.30	5.00
Methanol, nat., denat	.40	.35	.60	.60	.60	.60	.70	.70	.70	.70
Synthetic	.33	.33	.28	.28	.24	.24	.32	.32	.32	.32
Methyl chloride	.32	.32	.32	.32	.33	.32	.43	.39	.40	.39
Salicylate	.35	.35	.35	.35	.40	.35	.50	.50	.50	.50
Oil, codliver, USP	40.00	20.00	85.00	72.00	85.80	79.20	61.05	61.05	61.05	61.05
Opium, gum, USP	11.50	11.50	13.00	13.00	21.30	21.30	19.20	19.20	19.20	19.20
Phenolphthalein, USP	.85	.85	.85	.85	.85	.85	1.10	1.10	1.10	1.10
Potassium bromide	.31	.31	.27	.27	.33	.25	.34	.34	.34	.34
Quicksilver, dom	160.00	77.00	212.00	191.00	88.00	77.00	215.00	188.00	218.00	183.00
Quinine sulphate	.64	.61	.80½	.80½	.80½	.80½	.56½	.56½	.56½	.42
Rochelle salt, powd	.20¾	.17⅝	.42½	.42½	.34½	.32½	.37½	.32½	.32½	.32¼
Santonin, cryst	130.00	46.00	210.00	210.00	175.00	170.00	300.00N	242.00	110.00	76.50
Silver nitrate	.31½	.27	.32⅝	.25⅞	.55¾	.40½	.56⅝	.50⅝	.54¾	.53⅝
Sodium benzoate, USP	.46	.39	.46	.46	.46	.44½	.44½	.46	.46	.44½
Bicarbonate, USP	1.85	1.70	1.85	1.85	2.25	2.25	2.50	2.50	2.50	2.50
Strychnine	.60	.50	.70	.70	1.35	1.25	1.25	1.25	1.25	1.10
Thymol	1.55	1.45	3.00	2.75	3.65	2.40	3.75	3.25	3.25	3.00
Trichloroethylene	.09	.08	.08	.08	.09¾	.08	.11	.11	.11	.11

Botanical Drugs, Spices, and Gums

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Belladonna leaves	.30	.12½	3.45	1.60	2.75	1.40	.45	.32	.32	.28
Root	.40	.13	2.25	1.30	2.50	1.10	.45	.35	.45	.40
Black haw root bark	.24	.20	.40	.39	.82	.75	.75	.65	.65	.52
Buchu leaves	.80	.30	.80	.74	1.05	.80	.37	.35	.45	.45
Cascara sagrada bark	.14	.10	.23	.20	.44	.40	.37	.33	.34	.29
Chamomile flow., Hung	.60	.20	.80	.60	.70	.65	.80	.55	.70	.70
Digitalis leaves	.40	.35	.50	.45	1.05	1.05	1.10	1.10	1.05	.90
Ergot, NF	3.50	1.25	1.70	1.25	1.55	.90	7.50	2.50	3.75	2.75
Ginger, African	.09	.04¼	.45	.28	.15	.11	.28	.14	.15	.12
Goldenseal root	3.60	2.75	4.75	3.95	8.90	6.50	3.60	3.00	3.00	2.25
Gum arabic sorts	.19	.09	.22	.14	.14¼	.13	.16½	.14	.15½	.13½
Myrrh, USP	.65	.39	.78	.60	.48	.45	.30	.30	.39	.39
Tragacanth, No. 1	2.50	2.25	3.75	3.25	4.85	3.60	3.50	2.85	2.85	2.85
Henbane leaves	.65	.14½	3.25	1.85	1.25	1.00	.35	.32	.40	.35
Jalap root, NF	.24	.15	.65	.45	.45	.42	.50	.42	.39	.38
Lobelia	.12	.11	.50	.33	.82	.60	.85	.75	.75	.45
Mandrake root	.11	.09	.25	.18	.40	.35	.48	.29	.32	.29
Papain, powd	2.10	1.10	1.10	.84	6.50	5.75	7.00	5.00	7.00	4.00
Rhubarb root	.55	.35	1.20	.75	1.40	.60	.85	.70	.83	.75
Sarsaparilla root, Mex	.19	.13	.22	.19	.60	.45	.22	.22	.35	.17
Senega root	.85	.65	.95	.59	2.65	1.75	2.45	1.40	2.30	1.90
Senna leaves, Tinn., No. 1	.14	.09	.16	.14	.25	.17	.21	.20	.19	.17
Soapbark, whole	.23	.07	.13	.09	.18	.18	.28	.25	.22	.22
Stramonium leaves	.17	.13	.50	.27	.22	.22	.17	.16	.19	.17
Uva ursi leaves	.11	.08	.25	.20	.16	.12	.12	.08	.12	.12
Valerian root	.27	.09½	1.70	1.15	.58	.45	.40	.32	.38	.36
Vanilla beans, Mexican	6.50	5.00	16.00	11.00	10.50	8.25	4.50	2.75	7.50	4.50
Wild cherry bark	.07	.04½	.09½	.07	.24	.18	.19	.19	.19	.18

Essential Oils and Aromatic Chemicals

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Alcohol, benzyl	.63	.63	.63	.63	.65	.65	.64	.64	.64	.64
Citronellol	1.60	1.60	1.60	1.75	5.70	3.85	2.70	1.75	1.90	1.70
Coumarin	2.75	2.75	2.75	2.75	2.90	2.75	2.94	2.94	2.94	2.94
Oil, anise, USP	.85	.63	3.50	2.10	1.25	.65	2.25	1.55	2.75	1.75
Cinnamon, USP	1.20	.88	11.00	10.00	3.50	2.25	5.75	4.95	6.75	5.50
Citronella, Ceylon	.46	.34	1.70	1.05	2.25	.73	.95	.53	.53	.48
Clove, USP	1.55	.95	1.75	1.40	1.50	1.30	9.50	4.00	9.50	5.25
Eucalyptus, USP, 70-80%	.59	.53	.96	.70	1.18	1.05	1.05	.65	.75	.60
Geranium, Bourbon	3.25	2.40	25.00	17.00	16.50	10.50	17.00	11.00	10.85	9.75
Lavender, spike	1.15	.95	4.15	2.75	2.05	1.50	1.65	1.35	1.65	1.30
Lemon, Calif	3.00	2.00	3.25	3.25	3.50	3.10	6.00	5.50	7.10	5.75
Lemongrass	.85	.32	3.75	1.30	3.80	1.25	1.73	.75	1.30	.90
Lime, dist	4.15	3.00	13.00	3.25	6.00	4.00	7.50	6.00	6.50	5.25
Orange, exp., Calif	1.50	.75	3.25	2.25	1.70	1.60	1.90	.95	.90	.65
Peppermint, nat	2.75	2.05	7.00	5.30	8.50	7.60	7.25	5.15	5.75	4.50
Sandalwood, USP	5.50	4.50	6.00	5.85	16.50	11.15	11.00	9.00	9.25	10.25
Sassafras, artif	.75	.34	2.00	2.00	.90	.65	.65	.50	.48	.42
Spearmint, USP	2.00	1.70	3.25	3.00	13.50	6.75	8.25	7.50	8.25	5.70
Wormwood	3.25	2.00	3.00	2.75	5.60	3.85	6.50	6.50	5.50	5.65
Terpineol, prime	.25	.23	.40	.33	.47	.42	.36	.36	.36	.30
Vanillin, ex guaicol	2.50	2.10	2.35	2.35	3.15	3.00	3.00	3.00	3.00	3.00

Petroleum Products

	1939 H.	1939 L.	1942 H.	1942 L.	1947 H.	1947 L.	1952 H.	1952 L.	1953 H.	1953 L.
Kerosene, w.w	.052	.04¼	.063	.053	.09625	.062	.0925	.09	.09375	.08875
Oil, white, min., 125-135	.64½	.60½	.63	.49	.63	.54½	.645	.645	.595	.595
Paraffin, white, scale	.07	.0235	.04¼	.04¼	.06½	.06	.0745	.055	.0660	.055
Pentane	.08½	.08½	.08½	.08½	.17	.11	.135	.12	.14½	.12
Petrolatum, amber	.04	.02⅝	.04⅝	.03⅝	.04¼	.04½	.065	.065	.0525	.0475
Petroleum, naphtha, arum. V.M.&P.	.19 .10¼	.16 .10½	.21½ .11	.21½ .11	.22½ .04¼	.27 .04½	.255 .065	.255 .065	.275 .0525	.255 .0475
Propane, indus	.03¾	.03	.03¾	.03¾	.03¾	.03¾	.04	.04	.04	.04

Important Forward Steps in Chemistry in 1953

AN IMPORTANT NEW USE for Vitamin B_6 was indicated when medical researchers found that pregnant women frequently suffer from a B_6 deficiency. Correction of the condition requires larger dosage of vitamin B_6 than previously believed necessary.

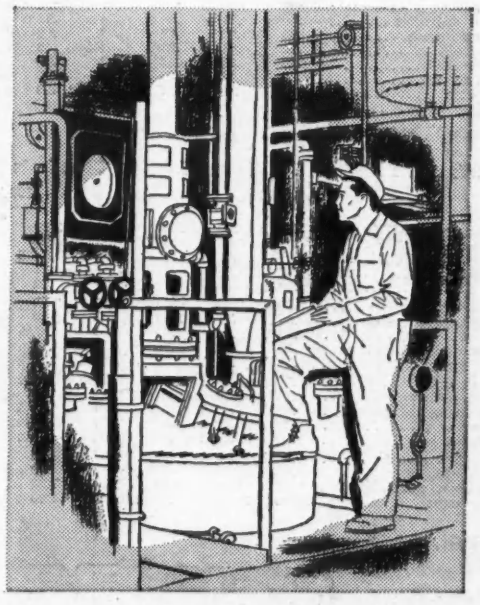
ADDITIONAL IMPORTANT EVIDENCE on the growth-promoting effects of vitamin B_{12} in undernourished children, and on its efficacy in the treatment of neuropathies was provided in a number of significant studies. This specific anti-pernicious anemia vitamin was first isolated by Merck.

MERCK'S DEVELOPMENT OF *VETSTREP*®—a form of streptomycin soluble in water or milk—provides an effective, inexpensive, easy-to-use treatment for *four* costly animal diseases—swine enteritis, calf scours, air-sac infection in chickens, and blue comb in turkeys.

NEW DENTAL USES FOR *HYDROCORTONE*® were firmly established. This substance—developed in the Merck Research Laboratories—has been found highly effective when applied as an ointment for treatment of inflammations of the gums, and for canker sores.

MERCK SHARP & DOHME

THE MERGER of Merck and Sharp & Dohme brings together two organizations with long traditions in the chemical and pharmaceutical industries—and provides a combination of skills and facilities in research and production for advancing health and welfare on a broad front.



COST OF THERAPY WITH *CORTONE*® and *HYDROCORTONE*® was substantially lowered again through Merck price reductions—made possible by the development of improved manufacturing procedures. Such production advances bring the benefits of these products to many more patients.

CORTONE, HYDROCORTONE, and VETSTREP are registered trade-marks of Merck & Co., Inc.

Research and Production for the Nation's Health

MERCK

MERCK & CO., INC.

Manufacturing Chemists

RAHWAY, NEW JERSEY

Chemicals, Oils and Drugs Price Changes in 1953

The following information is a compilation of prices for various chemicals and related products at the beginning of 1954 as compared with the beginning of 1953. The symbol 'N' signifies nominal; 'NP' no prices, while 'NS' indicates no stocks available.

A

	1953	1954
naphthene, below 92.5°C M.P. dms., works lb.	.40	.40
er 92.5°C M.P., dms., works lb.	.41	.41
taldehyde, 99%, tanks, works, lb.	.10½	.10½
tanilide, tech., bbls., c.l., dlvd. lb.	.26½	.29
SP, bbls., 2,000-lb lots lb.	.56	.61
tic anhydride, tanks, frt. alld. E. lb.	.14½	.14
toacetanilide, fib. dms., c.l., works lb.	.73	.75
toacetorthochloranilide, fib. dms., dlvd lb.	1.22	1.27
toacetorthotoluidide, fib., dms., dlvd lb.	.78	.79
tone, CP, tanks, dlvd lb.	.06½	.06½
tonitrile, dms., c.l., works lb.	.40	.33
tophenetidin, USP, bbls, works, frt. equald lb.	1.15	1.15
tophenone, cns., dms lb.	1.35	1.21
ch, l.c.l., dms., works lb.	.75	.75
tyl (N) para-aminophenol, dms., frt. adj lb.	1.50	1.75
tyltributyl citrate, tech., tanks lb.	.36	.32
tyltriethyl citrate, tech., tanks lb.	.36	.36
d, abietic, com'l, dms., c.l., works lb.	.12	.12
eryst., dms., c.l., works lb.	.06	.06½
cetic, com'l or redist., 28%, bbls. 100 lbs.	5.50	5.50
56%, bbls 100 lbs.	9.65	9.65
70%, bbls 100 lbs.	11.70	11.70
80%, bbls 100 lbs.	10.45	12.45
glacial, synth., CP., dms., works 100 lbs.	15.00	15.00
tech., tanks, works 100 lbs.	9.00	9.00
USP, dms., works 100lbs.	24.00	24.00
cetylsalicylic, USP, special, bbls., makers' primary distrib., point of ship't, 100 lb. lots lb.	.60	.60
standard, fine, cryst., gran. (30-40 mesh), powd., (80 mesh), bbls., same basis lb.	.55	.55

Freight equald. for ship't identical quantity over standard routes from N. Y., Phila., Midland, Mich., Chicago and St. Louis.

dipic, fib., drums, works lb.	.26½	.37
minoacetic, NF, bbls., frt. adjusted lb.	1.50	1.50
nthranilic, bbls., frt. equald. lb.	1.21	1.21
scorbic, USP, dms., 25-50 kilo lots kilo.	21.00	21.00
attery, cbys., c.l., works, E. 100 lbs.	2.40	2.40
enzoic, tech., bbls., 100 lb. lots or more lb.	.42½	.44
USP, bbls., 100 lb. lots or more lb.	.52½	54
etaoxynaphthoic, bbls., works, lb.	1.14	1.14
oric, tech., gran., bulk, c.l., works ton.	91.75	94.25

USP boric acid is $25 per ton higher.

roenner's, bbls lb.	1.47	1.76
utyric, 99%, tankcars, works, lb.	.32½	.32½
acodylic, bots lb.	10.50	10.50
amphoric, nat., dms lb.	4.00	4.00
synth., dms lb.	4.00	4.00
apric, dms. lb.	.32½	.26¼
aprylic, dms. lb.	.32½	.32¾
assela, dms., frt. alld lb.	1.44	1.44
astor oil, dms lb.	.22½	.35½
hicago, bbls., frt. alld lb.	3.21	3.21
hlorosulphonic, tanks, frt. equald. lb.	.034	.0415
holic, fib. dms lb.	10.75	NP
hromic, 99½-99¾%, dms., c.l., works lb.	.27	.27¼
innamic, refd., bots lb.	2.50	2.50
itric, anhyd., gran., fine gran., dms., c.l. lb.	.26½	.28¾
USP, gran., fine gran., bbls., c.l lb.	.24½	.27

Anhydrous and USP powdered citric acid ½c. per lb. higher.

leve's, mixed, bbls lb.	.79	.79
oconut oil, dist., tankcars lb.	.22¾	.25¼
double dist., tankcars lb.	.20¼	.26
orn, dist., tankcars lb.	—	.11¼
ottonseed oil, dist., dms lb.	.11¼	.12
double dist., dms lb.	—	.12½
resylic, coaltar, dom., 50% 207°C or above, tanks, frt. equald. gal.	.90	.91
204°-207°C, tanks, same basis gal.	—	.95
Petroleum, 195°-213°C, tanks, same basis gal.	.53	.55
211°-236°C, tanks, same basis gal.	.50	.50
220°-242°C, tanks, same basis gal.	.50	.50
imported, 75% at 215°C, dms., ex whse gal.	.85	.75
rotonic, fib. dms., works lb.	.31	.45
yanoacetic, tech., bbls lb.	.90	.90
ehydrocholic, injection, fib. dms., 10 to 100 lb. lots lb.	25.00	NP
oral, fib. dms., 10 to 100 lb. lots lb.	18.40	NP
esoxycholic, fib. dms., 10 to 100 lb. lots lb.	23.50	NP
iglycolic, bgs., works lb.	.14	.14
thylhexoic, tanks, works lb.	.33½	.33½
, crude, paste, bbls., works, lb.	1.67	2.10
olic, bots. gram.	1.60	1.60
ormic, 85%, cbys., c.l., works, lb.	.142	.157
90%, cbys., c.l., works lb.	.14½	.14½
umaric, tech., bgs., dms lb.	.38	.27
allic, NF VII, bbls., 1,000-lb. lots lb.	1.80	1.80
tech., bbls., 1,000-lb. lots lb.	1.58	1.58
amma, dry ground, bbls., frt. alld lb.	1.50	1.50
entisic, 100 lb. fib. dms lb.	8.50	8.50
luconic, tech., 50%, cbys lb.	.14½	.19
lutamic, 99½% laevo, dlvd., fib. dms., 100-lb. lots, works, lb.	2.53	2.45
lycerophosphoric, 35%, dms., works lb.	2.25	2.25
, bbls., works, basis 100% lb.	.82	.82
ydriodic, 1.50 s.g., cbys lb.	2.67	2.94
1.70 s.g., cbys lb.	2.96	3.23
ydrobromic, medicinal, 48%, cbys., dlvd. E. lb.	.37	.37
ydrochloric, 18°, tanks, works ton.	25.00	28.00
20°, tanks, works ton.	27.00	30.00
22°, tanks, works ton.	32.00	35.00
CP, USP, consumers, cbys., extra, c.l., works lb.	.11¾	.11¾

Acid hydrochloric, CP, USP, prices to dealers 1½c. per lb. less.

ydrocyanic, cyls., frt. alld lb.	.75	.75
dilute, NF, 2%, 5-lb. bots lb.	.40	.40

	1953	1954
Acid, hydrofluoric, anhyd., tanks, works lb.	.18	.21
70%, steel dms., works lb.	.1535	.18½
Hydroxyacetic, tech., 70%, tanks, Belle, W. Va., 100% basis lb.	.085	.095
Hypophosphoric, purif., 50%, cbys lb.	1.30	1.30
Isonicotinic, 100 lb. fib. dms., works lb.	10.00	5.00
J, bbls., works, basis 100% lb.	2.50	2.50
Koch, bbls., frt. alld lb.	.64	.64
L, bbls., frt. alld lb.	1.25	1.25
Lactic, edible, 50%, bbls., 20 or more lb.	.17	.17
80%, bbls., 5 or more lb.	.30	.30
plastic grade, 50%, bbls., 20 or more lb.	.21¾	.21¾
80%, bbls., 5 or more lb.	38.15	38.15
tech., 22%, bbls., c.l., works, 100 lbs.	6.30	6.30
44%, bbls., c.l., works, 100 lbs.	11.45	11.45
NF, 85%, cbys lb.	.85	.85
Laurent's, bbls. lb.	.60	.60
Lauric, 90%, dms lb.	.33¾	.39½
60%, dms lb.	.50	.23
Linseed oil, dist., dms lb.	.2060	.2055
water-white, dms. lb.	.2360	.2355
Maleic, cryst., powd., dms lb.	.37	.37
Malic, tech., dms lb.	.50	.50
Mandelic, NF, dms., 1,000-lb. lots lb.	2.35	2.35
Metanilic, dms., works lb.	.57	.57
Methacrylic, dms., c.l., and truckloads, works lb.	.76	.74½
Molybdic, 85-92%, dms., works lb.	.92	1.27
Monochloroacetic, purified, flakes, 99%, dms. lb.	.23½	.23½
tech., flake, 95-97%, bbls. lb.	.20	.20
Myristic, dist., dms lb.	.28¼	.28
Muriatic (see Acid, hydrochloric)		
Naphthenic, 220-230 acidity, tanks, works lb.	.14	.14
Neville and Winther's, dms., frt. alld lb.	1.05	1.20
Nicotinic, USP, dms., frt. adjusted kilo.	9.00	9.00
Nitric, 36° Be, cbys., c.l. works, E 100 lbs.	5.00	5.25
38° Be, cbys., c.l., works, E. 100 lbs.	5.50	5.75
40° Be, cbys., c.l., works, E. 100 lbs.	6.00	6.25
42° Be, cbys., c.l., works, E. 100 lbs.	6.50	6.75
60% HNO_3, tanks, works, basis 100% 100 lbs.	3.25	3.40
95% HNO_3, tanks, works, basis 100% 100 lbs.	4.25	4.40
CP, USP, consumers, cbys., extra, c.l., works lb.	.13½	.13½
Oleic, single-dist., tanks lb.	.11¾	.13¼
double-dist., (white), tanks, lb.	.14¼	.15¾
Orthochlorobenzoic, fib. dms., works lb.	1.13	1.13
Orthocresotinic, dms., ton lots, works lb.	.66	.66
Oxalic, bbls., c.l., works lb.	.15¾	.16½
Palm oil, double dist., dms lb.	.11½	.12¼
Para-aminobenzoic, tech., dms., works lb.	1.74	1.74
USP, dms., works lb.	3.50	2.50
Para-aminosalicylic, dms., 1,000-lb. lots, frt. adj lb.	4.25	4.00
Parachlorobenzoic, dms., works, lb.	1.59	1.59
Paranitrobenzoic, dms., works, lb.	.77	.77
Paratoluidinmetasulphonic, bbls., works lb.	.92	.92
Phenylacetic, bots. lb.	1.45	1.45
tech., dms., 1,000-lb. lots lb.	—	.90
Phosphoric, food grade, 75%, tanks, works 100 lbs.	4.90	5.10
NF, 85%, cbys., c.l., works, lb.	.08	.08½
NF, dms. lb.	.55	.55
Picric, NF, dms. lb.	.55	.55
tech., bbls. lb.	.32	.32
Propionic, synth., pure, tanks, works lb.	.19	.21
Pyrogallic, tech., bbls. lb.	2.76	2.76
Pyroligneous, dms., incl., l.c.l., works gal.	.36	.36
S, bbls., works lb.	3.25	3.25
Salicylic, crude, bgs. lb.	.38	.38
sublimed, tech., grade, bbls. lb.	.39	.39
dyestuffs, bbls., c.l. lb.	—	.41
USP, cryst., bbls. lb.	.46	.48
powder, bbls lb.	.51	.53
Sebacic, purif., dms., c.l., works lb.	.93	.74
Soybean oil, double dist., dms. lb.	.12¼	.15
single dist., dms. lb.	.12¼	.14½
Stearic, double pressed, bgs lb.	.12	.12¼
single pressed, bgs. lb.	.11½	.12¾
triple pressed, bgs. lb.	.14¼	.15
Succinic, cryst., purified, works lb.	.63	.63
Sulphanilic, tech., dms., frt. alld lb.	.18	.19
Sulphuric, 60° Be, tanks, works. ton.	16.30	18.60
66° Be, tanks, works ton.	20.00	22.35
96-100%, tanks, works ton.	21.00	21.00
CP, NF, consumers, cbys., extra, c.l., works, frt. equald. lb.	.09¾	.09¾
fuming, 20%, tanks, E. works ton.	22.40	25.00
Tallow, dist., dms lb.	.10½	.12¼
hydrogenated, dms. lb.	.10½	.13
Tannic, NF, fluffy, bbls., 1,000-lb. lots lb.	1.59	1.59
powder, bbls., 1,000-lb. lots lb.	1.50	1.50
tech., dms. lb.	.95	.95
Tartaric, USP, dom., bbls., 10,-000 lbs., 1 ship't lb.	.37	.37
imported, bgs. lb.	.28	.31
Thioglycolic, refined, bbls., cbys., basis 100% lb.	1.60	1.60
Tobias, bbls., frt. alld lb.	.74	.74
Toluenesulphonic, dms., c.l., works lb.	.16	.16
Trichloroacetic, bots. lb.	2.00	2.00
Tungstic, tech., kegs, works. lb.	4.30	4.25
Aconite root, bls. lb.	.65	.50
Aconitine, amorph., mild, bots. oz.	27.50	27.50
cryst., potent, bots. oz.	76.00	78.00
Acrylonitrile, tanks, works lb.	.44½	.31
ACTH, bots. gm.	20.00	20.00
Agar, USP, Kobe No. 1, strip, bbls. lb.	2.25	2.50
powd., 30 mesh, fib, dms lb.	2.25	3.00
Alanine, dextro-laevo, dms., works lb.	8.50	8.50
Albumen, (egg), edible, flake, bbls lb.	2.61	2.19
powd., bbls. lb.	2.65	2.23
tech, cryst., bbls. lb.	1.01	1.03

	1953	1954
Albumin, blood, light, dms., l.c.l. lb.	.70	.65
Alcohol, allyl, tanks, dlvd lb.	.30	.30
Amyl, ex pentane, tanks, frt. alld. E. of Miss lb.	.15	.15
fermentation, refined 126°-132° C. tanks, dlvd lb.	.31	.31
128°-132° C, dms., l.c.l., dlvd lb.	.36½	.33¾
ACS grade, dms., l.c.l., dlvd. lb.	.35¾	.35¾
synthetic, normal, tanks, works lb.	.40	.40
secondary, tanks, frt. alld E lb.	.21½	.17
tertiary, tanks, frt. alld. E. lb.	.18	.18
Benzyl, NF, dms. lb.	.64	.64
tech., dms., dlvd. lb.	.47½	.47½
Butyl, fermentation, normal, tanks, frt. alld lb.	.13	.13
synthetic, normal, tanks, frt. alld lb.	.13	.13
secondary, tanks, frt. alld., lb.	.11	.11
tertiary, tanks, frt. alld. lb.	.12	.12
Capryl, 85%, tanks, works lb.	.15	.15
95%, tanks, works lb.	.15	.16½
Cetyl, extra, fib., cns., 500-lb. lots or more lb.	.83	.73
smaller lots lb.	.85	1.15
NF, fib., cns., 140-lb. lots or more lb.	.63	.58
smaller lots lb.	.64	.59
Cinnamic, bots. lb.	2.25	2.15
Decyl, bots. lb.	1.70	1.75
Alcohol, denatured, CD12, CD13, CD14, tanks, dlvd. E. of Rockies gal.	.42½	.44½
Proprietary solvent, tanks, same basis gal.	.43	.46
SD1, tanks, same basis gal.	.43	.45½
SD23H, tanks, same basis gal.	.43½	.44
SD3A, tanks, same basis gal.	.41	.43
SD23A, tanks, same basis, gal.	.43½	.45½
SD29-1, tanks, same basis, gal.	.41½	.44½
SD30, tanks, same basis gal.	.40½	.43
SD35A, tanks, same basis, gal.	.43½	.46
SD40, tanks, same basis gal.	.42	.44
Diacetone, acetone, free, tanks, dlvd. lb.	.12	.12
tech., tanks, dlvd. lb.	.11½	.11½
Ethyl, 190 pf., USP, tax paid, tanks, dlvd. E. of Rockies gal.	20.95	20.38
tax free, tanks, same basis, gal.	.40	.43
absolute, 200 pf., tax paid, tanks, same basis gal.	21.45	21.48
Ethylbutyl, tanks, works lb.	.28	.28
Ethylhexyl, tanks, works lb.	.26¼	.23½
Furfuryl, tech., tanks, works. lb.	.19½	.184
Isobutyl, tanks, works lb.	.12	.12
Isopropyl, refd., 91%, tanks, dlvd. gal.	.38½	.37½
95%, tanks, dlvd gal.	.40¾	.39¾
99%, tanks, dlvd gal.	.43	.42
Lauryl, bots. lb.	2.00	2.00
Octyl, perfumers' grade, bots. lb.	1.70	1.75
Phenylethyl, dms. lb.	1.57	1.57
Polyvinyl, various grades, bgs., ton lots, works lb.	.72½	.72½
Propyl, normal, tanks, dlvd. lb.	.10	.10
Tetrahydrofurfuryl, tanks, Niagara Falls lb.	.40	.43
industrial grade, tanks, Niagara Falls, N. Y. lb.	.27	.29
Aldrin, 60% solut., dms., c.l., works, frt. alld. lb.	.645	.538
Aldol, 95%, dms., works lb.	.23	.23
denaturing grade, dms. gal.	2.15	2.15
Aletris, root, bgs. lb.	1.20	1.75
Allethrin, 100%, dms., frt. alld. lb.	32.00	32.00
90%, dms., frt. alld lb.	28.80	28.80
solution, 20%, dms., 100-lb. bots., frt. alld. lb.	6.65	6.50
2½%, dms., frt. alld. gal.	6.00	.90
Allyl bromide, cbys., works lb.	1.35	1.35
Chloride, tanks, dlvd. lb.	.15	.15
Starch, solid, dms., works lb.	.53¾	.52¾
solution, 40% toluol-butanol, dms., works lb.	.25½	.25½
Aloe, Cape, cs. lb.	.28	.29
powdered, cs. lb.	.44	.38
Curacao, kgs. lb.	.50	.50
Socotrine, kgs. lb.	.25	NP
Aloin, USP, bbls., dms., kgs lb.	4.25	3.75
Alphanaphthol, bbls., frt. alld. lb.	.85	1.00
Alphanaphthylamine, bbls., frt. alld lb.	.45	.50
Alphanitronaphthalene, bbls., frt. alld lb.	.41	.41
Alphapicoline, ret. dms., c.l., works, frt. equald lb.	.39½	.43½
Alphaterpineol, dms., l.c.l., dlvd. E lb.	.17	.17
Alphatocopherol, bots kilo.	250.00	225.00
Acetate, bots. kilo.	250.00	225.00
Alum, ammonium, gran., bbls., works 100 lbs.	4.30	4.30
lump, bbls., works 100 lbs.	4.55	5.05
powd., bbls., works 100 lbs.	4.70	5.20
USP, burnt, dms. lb.	.20	.20
Potassium, gran., bbls., works. 100 lbs.	4.55	4.55
lump, bbls., works 100 lbs.	4.80	5.30
USP, burnt, dms. lb.	.20	.20
hydrous, dms. lb.	.07¾	.07¾
Potash-chrome, bbls lb.	.17	.17
Sodium, bbls., c.l., works. 100 lbs.	4.60	4.60
Alumina, calcined, bgs., c.l., works lb.	.0385	.0385
Aluminum acetate, basic solut., 24%, bbls., l.c.l., works lb.	.14	.14
chloride, com'l anhydrous, dms., c.l., works, frt. equald. lb.	.15	.15
cryst., dms., c.l., works lb.	.1030	.1030
solution, 32°, tankcars, works 100 lbs.	.0369	.0369
NF, gran., dms., works lb.	.27	.29
Fluoride, tech., anhyd., bags, c.l., works lb.	.11½	.1540
Formate, basic solution, cbys. lb.	.09½	.09½
Hydrate, heavy, bgs., c.l., frt. equald. ton.	60.00	60.50
light, bgs., dlvd lb.	.17	.17
Hydroxide, gel., pharmaceutical, 14-15%, Al_2O_3, contract, works lb.	.21	.22
9-9½%, Al_2O_3, contract, works lb.	.18	.19
dried, USP, XIV, contract, dms lb.	.79½	.82½

	1953	1954
Aluminum laurate, precip., bbls. lb.	.44	.44
Metal, 99%, ingots, 10,000 lbs. lb.	.20	.21¼
pigs, 10,000 lbs. lb.	.19	.20
Oxide, amorphous (see Alumina, calcined).		
Paste, lining, extra fine, dms. lb.	.59½	.63½
standard, dms. lb.	.41	.41
Powder, lining, extra fine, dms. lb.	.97½	1.02¼
standard, dms lb.	.68½	.72
Aluminum powder and paste prices are f.o.b. shipping point.		
Resinate, precip., dms., frt. alld lb.	.27½	.27½
Stearate, dibasic, ctns., c.l. lb.	.33	.33
monobasic, ctns., c.l. lb.	.33	.33
tribasic, ctns., c.l. lb.	.33	.33
Sulphate, com'l, bgs., c.l., works, frt. equald 100 lbs.	1.65	1.65
ground, bgs., works ton.	33.00	37.00
lump, bgs., works ton.	36.00	40.00
iron-free, bgs., c.l., works, frt. equald 100 lbs.	3.25	3.55
USP, gran., dms., works lb.	.13	.13
powd., dms., works lb.	.14	.14
Ambergris, gray, bots oz.	8.00	8.00
Aminoazotoluene, bbls lb.	.94	1.03
Aminoethylethanolamine, tanks, works lb.	.45	.45
Aminomethylpropanol, cns., dms., works lb.	.60	.60
Aminophyllin, USP, 100-lb. dms., lb.	4.30	3.05
Aminopyrine, USP, bots., dms. lb.	6.00	4.25
Ammonia, anhyd., fertilizer, tanks, works ton.	79.00	85.00
pure, cyls., extra, zone 1 lb.	.17	.18½
refrigeration, tanks, works. ton.	80.00	87.50
Aqua (29.4% NH_3), tanks, works, anhyd. basis ton.	90.00	96.00
Ammoniac, sal, gray, bgs., c.l., works, frt. equald 100 lbs.	6.25	8.25
white, gran., bgs., c.l., works. 100 lbs.	4.75	5.25
Ammoniacal liquor, tankcars, anhyd, basis ton.	90.00	96.00
Ammonium acetate, purified, dms lb.	.38	.38
Benzoate, USP, dms., kgs., 4,000 lb. lots, frt. alld lb.	.80	.80
Biborate, bbls., c.l., works ton.	312.00	312.00
Bicarbonate, dom., dms., c.l., works lb.	.06	.06½
imported, dms., l.c.l. lb.	.07¼	.07¼
Bichromate, bbls., works lb.	.33	.34½
Bifluoride, dms., dlvd lb.	20.35	21.45
Bromide, NF, gran., bbls. lb.	.38	.38

Powdered ammonium bromide 10c. per lb. higher.

Carbonate, USP, lump, powd., dms lb.	.23	.23
Chloride, USP, bbls., dms., lb.	.17¼	.17¼
Citrate, diabasic, bbls lb.	.75	.75
Hypophosphite, NF, dms lb.	2.40	2.40
Iodide, NF, bots., jars lb.	4.01	4.26
Linoleate, 80%, dms., works, lb.	.50	.50
Nitrate, fertilizer grade, Canadian, eastern, 33.5% N, bgs., c.l., shipping point ton.	72.50	77.50
western, 33.5% N, bgs., f.o.b. Los Angeles, bgs. ton.	86.84	89.84
dom., bgs., western works. ton.	64.00	68.00
with dolomite, 20.5% N, bgs., Hopewell, Va ton.	51.00	51.00
Oleate, 75%, dms., works lb.	.55	.55
Oxalate, fine gran., dms lb.	.25	.25
Pentaborate, gran., bbls., c.l., works ton.	222.00	222.00

Ammonium pentaborate powder, $10 per ton higher.

Perchlorate, kgs., works lb.	.50	.50
Persulphate, kgs. lb.	.38	.38
Phosphate, com'l., bgs., c.l., works, frt. equald lb.	.08½	.08½
dibasic, NF V, bbls., dms., lb.	.45	.45
tech., bgs., c.l., works, frt. equald lb.	.08½	.08½
Salicylate, NF, dms., kgs lb.	1.34	1.34
Silicofluoride, dms., works lb.	.11	.11
Sulphamate, bbls., dms., works. lb.	.18	.18
Sulphate, coke-oven, bulk, producing ovens ton.	44.00	44.00
synthetic, bgs., c.l., western, works ton.	50.00	49.50
bulk, works ton.	47.00	45.00
purified, dms., works lb.	.07½	.08½
Sulphide, liquid, 40-45%, basis 100%, tanks, frt. alld. ton.	181.50	240.00
Thiocyanate, tech., dms., c.l., works lb.	.18	.18
Thioglycollate, com'd., cbys., 100% basis lb.	1.60	1.60
highly purified, cbys., same basis lb.	1.70	1.70
Thiosulphate, cryst., photo grade, fib. dms., frt. alld lb.	.65	.65
60%, solution, dms., c.l., works lb.	.06½	.06½
Amphetamine hydrochloride, dibasic, dextro, bots lb.	32.00	28.00
dextro-laevo, dms. lb.	6.50	6.00
monobasic, dextro., bots lb.	32.00	28.00
Phosphate, dibasic, dextro, bots lb.	32.00	28.00
Sulphate, dextro, dms lb.	32.00	28.00
dextro-laevo, dms. lb.	6.50	6.00
Amyl acetate, ex fusel oil, tech., tanks, frt. alld. E. of Rockies lb.	.15	.15
ex pentane, tanks, frt. alld. E. of Rockies lb.	.18	.15
Butyrate, dms. lb.	.90	.90
Cinnamic aldehyde, dms. lb.	1.70	1.70
Nitrite, USP, bots. lb.	1.75	1.75
Salicylate, cns., dms. lb.	.75	.74
Anethol, NF, cns., dms. lb.	1.00	1.25
Angelica root, dom., bls. lb.	.60	.60
Anilin oil, tanks, works, frt. alld. lb.	.18	.20
Salt, dms., frt. alld lb.	.30	.33
Anise, Mexican, bgs. lb.	.14½	.22
Spanish, bgs. lb.	.15	.22N
Syrian, bgs. lb.	.13½	.20
Turkish, bgs. lb.	.13½	.26N
Anisic aldehyde, bots., dms lb.	2.35	1.80
Anthracene, 90-95%, bbls., ton lots, works lb.	.80	.80
Anthraquinone, 99.5%, bbls., frt. alld. lb.	.85	.80

Antimony Butter—Blue, Peacock

	1953	1954
Antimony butter (see Antimony trichloride).		
Metal, bulk, c.l., mines	lb. .50	.28½
Oxide, bgs., c.l., frt. alld	lb. .34	.36
Sulphide, 62-64%, bgs., divd.	lb. .36	.30
Trichloride, pails, c.l., works.	lb. .43	.38½
solution, cbys	lb. .20	NP
Antipyrene, NF, dms	lb. 2.50	2.50
Apomorphine hydrochloride, USP, bots	oz. 23.40	23.40
Areca nuts, powd., bbls	lb. .13	.15
Arecoline hydrobromide, NF, bots., tins	oz. 5.00	4.50
Arginine monohydrochloride, laevo, dms., 1 kilo lots.	kilo. 77.00	77.00
Argols, min., 50% bgs., shipment ports, per 100 kilos., basis 100%	21.50N	NP
Arnica, flowers (true Montana), bbls	lb. .65	.70
Arsenic, metal, lump, bbls., USP, prompt shipment.	lb. .80	.70
Trioxide, USP, dms	lb. .40	.48
White, powd., bbls., c.l., divd.	lb. .05½	.05½
Asafetida, cs	lb. .32	.36
powd., bbls., dms	lb. .50	.50
Asbestos, Canadian, crude, No. 1, c.l., (20 tons), mines	ton. 1,300.00	1,300.00
No. 2, c.l., (20 tons), mines.	ton. 675.00	675.00
Run-of-mine, c.l., (20 tons), mines	ton. 556.00	556.00
3K, c.l., (20 tons), mines.	ton. 436.00	436.00
3R, c.l., (20 tons), mines.	ton. 371.00	371.00
Asbestos, Canadian, crude, 3T, c.l., (20 tons), mines.	ton. 348.00	348.00
3Z, c.l., (20 tons), mines.	ton. 321.00	321.00
4K, c.l., (20 tons), mines.	ton. 173.00	173.00
4M, c.l., (20 tons), mines.	ton. 173.00	173.00
4T, c.l., (20 tons), mines.	ton. 156.00	156.00
4Z, c.l., (20 tons), mines.	ton. 156.00	156.00
5D, c.l., (20 tons), mines.	ton. 122.50	122.50
5K, c.l., (20 tons), mines.	ton. 122.50	122.50
5M, c.l., (20 tons), mines.	ton. 116.50	116.50
5R, c.l., (20 tons), mines.	ton. 110.00	110.00
6D, c.l., (30 tons), mines.	ton. 78.00	78.00
7D, c.l., (30 tons), mines.	ton. 68.50	68.50
7F, c.l., (30 tons), mines.	ton. 65.00	65.00
7H, c.l., (30 tons), mines.	ton. 55.00	55.00
7K, c.l., (30 tons), mines.	ton. 46.00	46.00
7M, c.l., (30 tons), mines.	ton. 40.00	40.00
7R, c.l., (30 tons), mines.	ton. 39.00	39.00
7 RF, c.l., (30 tons), mines.	ton. 40.00	40.00
7T, c.l., (30 tons), mines.	ton. 37.00	37.00
Asbestos, Canadian, crude, 7TF, c.l., (30 tons), mines.	ton. 40.00	40.00
8S, c.l., (30 tons), mines.	ton. 27.00	27.00
Asbestos c.l. prices are in U. S. funds, l.c.l. lots $4 per ton higher.		
Asphalt, gilsonite, black, jet, bgs., c.l., Craig, Colo., Sieber Cky, Utah.	ton. 34.00	34.00
select, 350°F, fusing point, bgs., c.l., same basis	ton. 36.00	38.00
270°295°F, fusing point, bgs., c.l., same basis	ton. 37.00	37.00
jet, bgs., c.l., same basis.	ton. 34.00	34.00
Manjak, No. 10, crude, dms., works	lb. .06½	.06½
Petroleum, cut-back, tanks, tankwagons, ref'y	gal. .09	.09
emulsion, tanks, tankwagons, ref'y	gal. .09½	.09½
steam-refd., less than 80 penetration, tanks, tankwagon, refinery,	ton. 22.00	22.00
80-300 penetration, tankwagon, refinery	ton. 21.00	21.00
Atropine, USP, bots	oz. 9.35	8.00
sulphate, USP, bots	oz. 5.25	4.00

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units.	.70	.70
Balm of Gilead, buds, dried, bgs.	lb. 1.35	1.35
Barberry root bark, bgs	lb. .35	.28
Barbital, USP, 100-lb. dms	lb. 5.00	4.50
Sodium, USP, dms	lb. 5.25	4.75
Barium carbonate, precip., bgs., c.l., works	ton. 82.50	92.50
Chlorate, kgs., works	lb. .34	.32
Chloride, anhyd., bgs., c.l., works	ton. 152.00	158.00
NF, cryst., dms.	lb. .16	.18
Chromate, bgs., frt. equald.	lb. .30	.35
Dioxide (see Oxide).		
Hydrate, crystals, bgs	lb. .09½	.09½
Iodide, bots.	lb. 6.14	6.14
Nitrate, bbls., c.l., works.	lb. .12½	.12½
Oxide, grd., dms., works.	ton. 250.00	255.00
Peroxide, dms., works	lb. .16	.16
Stearate, ctns., c.l.	lb. .37	.37
Sulphate, X-ray, bbls	lb. .14	.14
Sulphide, dms., c.l., works.	ton. 71.50	85.00
Barytes, southern off color, bgs., mines.	ton. 20.00	25.00
95.75%, bgs., mines	ton. 20.00	25.00
water-grd., paper bgs., c.l., St. Louis.	ton. 37.60	41.60
Bauxite, bulk, mines	ton. 8.50	9.50
Belladonna leaf, bls	lb. .32	.28
Root, bls.	lb. .50	.45
Bentonite, dom., 200 mesh, bgs., works.	ton. 12.50	14.00
Italian, white, high gel., bgs.,	ton. 65.90	80.00
low gel, bgs., 10 tons to c.l., ex dock.	ton. 63.40	78.95
Benzal chloride, cbys., works.	lb. .22	.22
Benzaldehyde, NF, dms.	lb. .74	.74
tech., cbys., dms	lb. .49	.44
Benzene hexachloride, 99% gamma isomer (see Lindane).		
tech., bgs., dms., c.l., works, gamma unit.	lb. .013	.009
gamma, 50%, dust, dry, distributors, dms., c.l., divd., gamma unit.	lb. .0185	.015
wet, distributors, dms., c.l., divd., gamma unit	lb. .0280	.02
Benzidine hydrochloride, bbls., frt. alld.	lb. .94	1.00
Benzocaine, cns.	lb. 3.48	3.48
Benzol, pure or nitration, tanks, works, Bethlehem, Pa.	gal. .38¾	.40
Birmingham dist.	gal. .30	.40
Chicago district	gal. .30	.40
Cleveland district.	gal. .30	.40
Geneva, Utah	gal. .30	.40
Johnstown, Pa.	gal. .36¾	.40
Lackawanna, N. Y.	gal. .38¾	.40
Lone Star, Texas.	gal. .37	.41
Minnequa, Colo.	gal. .35	.39
Philadelphia, Pa.	gal. .38¾	.40
Pittsburgh district.	gal. .30	.40
Sparrows Pt., Md.	gal. .38¾	.40
Syracuse, N. Y.	gal. .38¾	.40
Terre Haute, Ind.	gal. .35	.40
Youngstown, Ohio	gal. .35	.40
Benzophenone, dms.	lb. 1.40	1.40
Benzonitrile, dms., c.l., works.	lb. .46¾	.46¾
Benzotrichloride, cbys., frt. alld.	lb. .18	.18
Benzoyl chloride, cbys., dms., c.l., works, frt. equald.	lb. .21½	.21½
Peroxide, pure, fib., ctns., works.	lb. .90	.90
Benzyl acetate, f.f.c., dms.	lb. .64	.62
Benzoate, USP, f.f.c., cns., dms.	lb. .72	.62
Chloride, tech., cbys., c.l., works, frt. equald.	lb. .21	.20½
Cinnamate, cns.	lb. 3.00	3.30
Formate, cns.	lb. 1.60	1.30
Propionate, bots.	lb. 1.35	1.35
Salicylate, bots.	lb. 1.65	1.55
Benzilidinacetone, bots.	lb. 1.68	1.68
Benzylisoeugenol, bots.	lb. 8.80	8.60
Berberine bisulphate, cns.	lb. 25.00	25.00
Hydrochloride, bots.	lb. 35.00	35.00
Betagammapicoline, 5°, dms., c.l., works.	lb. .29½	.31
Betamethylnaphthaline, 32° C. m.p., dms., works.	lb. .90	.90
Betanaphthol, resublimed, dms., works.	lb. .78½	.78½
tech., bbls., c.l., works.	lb. .32½	.32½
Salicylate, dms.	lb. 5.00	5.00
sulphate, cns.	lb. —	35.00
Betanaphthylamine, tech., bbls., works.	lb. 1.05	1.05
Betaphenylethylamine, dms., works, 1,000-lb. lots	lb. 1.25	1.25
Biotin, cryst., bots.	gram. 10.00	10.00
Bismuth, chloride, jars	lb. 5.11	5.11
Hydroxide, dms.	lb. 4.65	4.65
Metal, bxs., ton lots	lb. 2.25	2.25
Nitrate, cryst., dms.	lb. 2.10	2.10
Oxide, anhydrous, dms.	lb. 4.47	4.47
Oxychloride, dms.	lb. 4.32	4.32
Phenolsulphonate, fib., dms.	lb. 5.22	5.22
Subcarbonate, USP, dms.	lb. 3.30	3.20
Subgallate, NF, fib., dms.	lb. 3.15	3.15
Subiodide, fib., dms.	lb. 5.37	5.37
Subnitrate, NF, dms.	lb. 2.65	2.65
Subsalicylate, USP, dms.	lb. 3.50	3.50
Bismuth-ammonium citrate, USP, powd., jars	lb. 4.22	4.22
Black, acetylene, bgs., c.l., works.	lb. .16	.17
Bone, dms., l.c.l., frt. alld	lb. .15½	.15½
Pacific coast bone black prices, 2c. per lb. higher.		
Carbon, channel, beads, bulk, c.l., works	lb. .07	.07
uncompressed, regular, bgs., c.l., works	lb. .10	.12
furnace, fast extruding, bgs., c.l., works.	lb. .06	.06
high abrasion, bulk, c.l., works.	lb. .07½	.07½
high modulus, bgs., c.l., works.	lb. .05½	.05½
semi-reinforcing, bgs., c.l. works.	lb. .04	.04½
Iron oxide, pure, bgs., c.l., works.	lb. .11¾	.12¾
Lamp, bgs., c.l., works.	lb. .16	.16
Mineral, bgs., works	lb. .0160	.0160
Blackberry root bark, bls.	lb. .32	.50
Black haw, root bark, bls.	lb. .65	.65
Tree bark, bls.	lb. .40	.40
Blanc fixe, dry, by-product, bgs., c.l., works.	ton. 100.00	155.00
direct process, bgs., c.l., works.	ton. 90.00	100.00
pulp, 66⅔%, bbls., c.l., works.	ton. 84.00	105.00
Bleaching powder, dms., c.l., works.	100 lbs 5.02	5.02
Blood, dried, 16-16½%, ammo., bgs.	unit-ton. 7.00	7.50
high-grade, unground, 16-17% ammo., bulk, Chicago	unit-ton. 7.00	8.00
Soluble, bgs., c.l.	lb. .17	.17
Bloodroot, bls.	lb. .55	.60
Blue, alkali, dry, bbls., divd. N. of Tenn. and N. C. E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb. 1.80	2.00
toner, bbls., litho flushed, same basis	lb. 1.00	1.15
Chinese, bbls., same basis	lb. .39¾	.48
Cobalt, genuine, bbls., same basis	lb. 4.90	4.90
Methyl violet, toner, molybdated, PMA, bbls., same basis	lb. 2.00	2.60
tungtated, PTMA, bbls., same basis	lb. 4.05	3.95
Milori, bbls., same basis	lb. .39¾	.48
Peacock, fugitive, 100% color strength, bbls., same basis	lb. .75	.75

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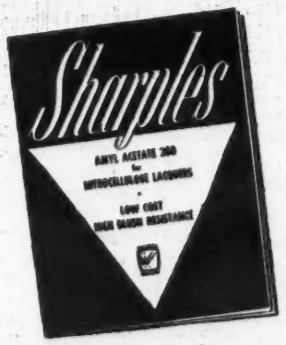

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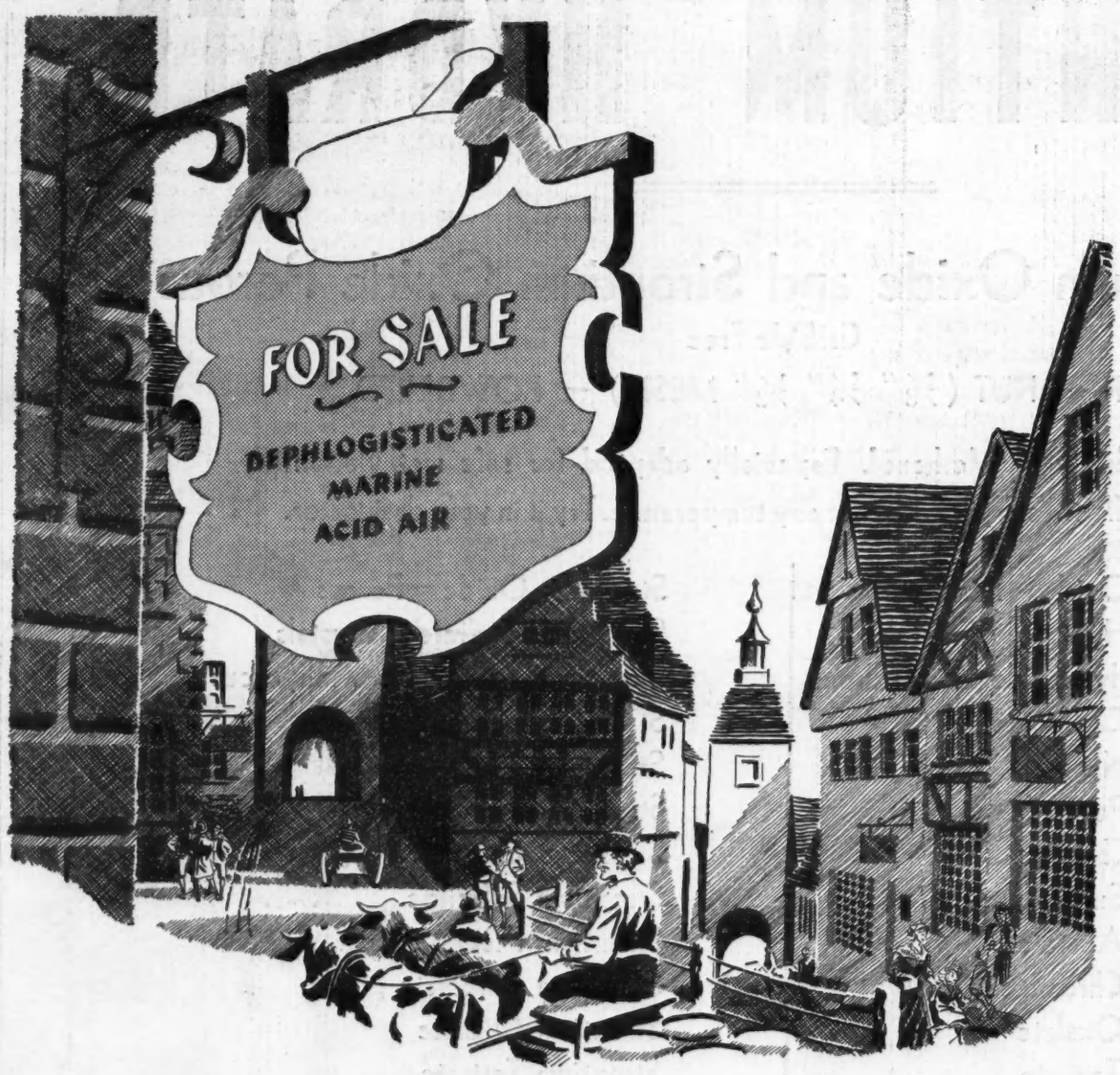
		1953	1954
Blue, phthalocyanin, full strength, bbls., same basis	lb.	3.85	3.45
Potash, CP, bbls., same basis	lb.	.56	.56
Prussian, insol., bbls., same basis	lb.	.39¾	.48
soluble, bbls., same basis	lb.	.48	.48
Soda CP, bronze, bbls., same basis	lb.	.39¾	.56
Ultramarine, cobalt-type, dry or pulp, bbls., same basis	lb.	.28	.30½
regular types, dry or pulp, bbls., same basis	lb.	.15	.22½
Victoria toner, molybdic, bbls.	lb.	3.90	4.10
tungstated, PTMA, bbls	lb.	6.35	5.15
Blue dry colors, dlvd. prices ½c. higher Ala., Fla., Ga., La. (Shreveport 1¼c.), Miss., N. C., S. C., Tenn., Tex. (El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher, Pacific Coast, Denver, Pueblo, Salt Lake City, Wichita frt., equalized with Chicago.			
Bone meal, steamed, works, E	ton.	75.00	55.00
Borax, tech., anhydrous, bulk, c.l., works	ton.	67.50	70.00
granular, decahydrate bulk, c.l., works	ton.	33.25	35.75
Borax packed in kgs. is $45.50 per ton higher than borax packed in paper bags. USP borax, $15 per ton higher than tech.			
Bordeaux mixture, bgs., c.l., works, frt. alld., or nearest whse. point	lb.	.15	.16
Borneol, cns.	lb.	2.25	2.85
Borontrifluoride gas, cyls., truckload, works	lb.	.62	.62
Bromine, purified, cs., c.l., frt. alld. E. of Rockies	lb.	.25	.27
dms., lead-lined, dlvd	lb.	.25	.34
Bromoform, pharmaceutical grade, cbys	lb.	1.52	1.52
Bromstyrol, bots.	lb.	5.40	5.40
Brown, iron oxide, synth., bgs., l.c.l., works	lb.	.12¾	.13⅜
Oxide, metallic, bgs., works	lb.	.03¾	.04
Sap, crystals, bgs., works	lb.	.12	.12
powdered, bgs.	lb.	.13	.13
Sienna, burnt, paper bgs., c.l., works	lb.	.04½	.04¼
raw, paper bgs., c.l., works	lb.	.04½	.04½
Umber, burnt, American, bgs., c.l., works	lb.	.06	.06
Turkey type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y.	lb.	.06¼	.06¼
raw, American, bgs., works	lb.	.06¼	.06¾
Turkey type, bgs., works	lb.	.06¼	.06¼
Vandyke, bbls., works	lb.	.11	.09½
Brucine, cns., 100 oz. lots	oz.	.30	.20
Sulphate, NF, cns., 100 oz. lots,	oz.	.26	.15
Buchu leaves, bls.	lb.	.35	.45
Butadiene, tanks, refy.	lb.	.12½	.15
Butane, indust., tanks, group 3,	gal.	.05	.04
Butyl acetate, fermentation, normal, tanks, frt. alld	lb.	.13	.13
Butyl acetate, synthetic, normal, tanks, dlvd., E	lb.	.13	.13
secondary, tanks, same basis	lb.	.10¾	.10¾
Aldehyde, tanks, dlvd.	lb.	.20¾	.19½
Chloride, dms., c.l., works	lb.	.37½	.37½
Lactate, tanks, frt. alld., E. of Rockies	lb.	.33	.33
Laurate, dms., works	lb.	.39	.39
Oleate, refd., dms., l.c.l., works	lb.	.36	.36
Phenylacetate, dms.	lb.	4.50	4.50
Stearate, dms., l.c.l., frt. alld.	lb.	.24	.24

C

Cadmium, iodide, jars	lb.	5.56	6.25
Metal, ingots or sticks, cs., dlvd.	lb.	1.50	2.00
Stearate, dms., ton lots	lb.	—	1.42
Caffeine, natural, USP, cryst., dms., 100 lbs. or more	lb.	3.30	2.80
anhydrous, dms.	lb.	3.50	3.00
synthetic, USP, cryst., dms., 100 lbs. or more	lb.	3.30	2.80
anhydrous, dms., 100 lbs. or more	lb.	3.50	3.00
citrated, USP, dms., 100 lbs. or more	lb.	2.35	2.65
Calamine, USP, dms.	lb.	.34	.34
Calciferol, cryst., vials, 25 to 100 gms. or more, works	gram	1.00	.90
in edible oil, dms., 10,000 or more s.u. (1 standard unit equals 1,000,000 USP units), works	unit.	04¾	.04¾
Calcium arsenate, dealers, dms., c.l., whse., works, frt. alld. on 96 lbs. or over	lb.	.10	.09
Bromide, NF, jars	lb.	.90	.90
Carbide, standard generator size, dms., c.l., dlvd.	ton.	121.00	134.40
Carbonate, natural, dry-grd., air floated, 99.5%—325 mesh, bgs., c.l., works	ton.	—	7.50
chalk, whiting, 325 mesh, bgs., works	ton.	—	32.00
water-grd., ½ to 10 microns bgs., c.l., works	ton.	—	30.00
10 to 20 microns, bgs., c.l. works	ton	—	.17
precipitated, dense, bgs., c.l., works	ton.	—	30.00
medium, bgs., c.l., works	ton.	—	35.00
surface treated, bgs., c.l., works	ton.	—	35.00
ultrafine, bgs., c.l., works.	ton.	—	110.00
Chloride, cryst., purified, bbls., jars	lb.	.28	.27
flake, 77-80%, paper bags, c.l., works, frt. equald.	ton.	25.00	27.00
liquor, 40%, tankcars, works, frt. alld.	ton.	10.50	11.50
pellets, bgs., c.l., works	ton.	31.25	33.00
powder, bgs., c.l., works.	ton.	31.25	37.65
solid, 73-75%, dms., c.l., works, frt. equald.	ton.	23.50	25.50
USP, gran., bbls	lb.	.30	.34
Chromate, bgs., frt. equald.	lb.	.29½	.29½
Cyanide, dms., dlvd. E. of Rockies	lb.	.24	.24
Gluconate, AA, bbls., dms.	lb.	.65	.70
USP, bbls., dms.	lb.	.58	.63
Glycerophosphate, NF, fib. dms.	lb.	2.00	2.30
Hydride, dms., works	lb.	2.20	2.20
Hypochlorite, high test, cns., cased (45 lbs.), dlvd., E. of Rockies	cs.	21.00	22.60
Hypophosphite, dms., ton lots or less	lb.	.90	.90
Iodide, jars	lb.	4.32	4.52
Lactate, USP, dms., 10,000 lb. lots or more, works	lb.	.40	.40
Mandelate, USP, dms., works.	lb.	2.10	2.10
Naphthenate, liq., 4%, Ca., dms., frt. equald.	lb.	.25¾	.27¼
Nitrate, tech., bbls., works	lb.	.10	.13
fertilizer grade, bgs., c.l., Los Angeles	ton.	49.25	48.00
Pantothenate dextro, jars, 100 gms. or more, frt. adjusted.	gram.	.07½	.07¼
Para-aminosalicylate, fib. dms., 1,000-lb. lots or more, frt. adjusted	lb.	7.00	7.00
Phenolsulphonate, dms	lb.	.70	.70
Phosphate, dibasic, USP, bgs., c.l., 100 lbs.	ton.	7.10	7.10
feed grade, bgs., c.l., works.	ton.	90.00	75.00
monobasic, bgs., 10,000 lb. lots, works, frt. equald	lb.	.0625	.0640
tribasic, precip., NF, bgs., c.l., works 100 lbs.		7.10	7.60
Phytate, bgs., works	lb.	.28	.28
Resinate, precip., dms., frt. alld., works	lb.	.27¾	.27¾
Silicate, hydrated, bgs., c.l., works	lb.	.06	.06
Stearate, ctns., c.l.	lb.	.35	.35
Calcium-strontium sulphide, phosphorescent, steel pails, 100 lb. to 999 lb. lots, works	lb.	2.60	2.60
fine particle size, same basis, works	lb.	2.65	2.65
Calomel, USP, powd., dms.	lb.	4.02	4.02
Camphene, 46° m.p., tanks, incl., c.l., works	lb.	.1660	.1660
Camphor, monobromated, NF, dms., kgs	lb.	3.00	3.00
natural, USP, powd., 100-lb. lots, bbls	lb.	.50	.51
tablets, 1 oz., ½ oz., cs	lb.	.63	.63
synth., tech., bbls., 1,500 lb. lots, works	lb.	.55½	.55⅛
USP, gran., powd., bbls., 2,000-lb. lots	lb.	.57	.57
tablets, tins, 2,000-lb. lots.	lb.	.90	.90
Cantharides, Chinese, cs.	lb.	1.05	2.00
powd., bxs	lb.	1.15	2.25
Russian, bgs	lb.	2.80	4.00
powd., bxs	lb.	2.90	4.35
Capsicum oleoresin, NF, from dom. peppers, cns	lb.	4.25	4.25
from African peppers, dms.	lb.	4.75	4.75
Caramel coloring, NF, bbls.	gal.	1.05	1.05
Caraway seed, Dutch, bgs.	lb.	.09¾	.12
Carbazole, 97%, bbls., ton lots, works	lb.	1.25	1.05
Carbinol methylisobutyl, tanks, dlvd	lb.	.13½	.13
Carbon bisulphide, 50-gal. dms., c.l., works, frt. alld., to competitive points	lb.	.07	.07¼
Dioxide, industrial, wholesale, cyl	lb.	.08	.08
Tetrachloride, CP, dms., works	lb.	10.97	11.00
NF, cbys	lb.	.17	.17
tech., tanks, E. of Rockies, frt. alld	lb.	.0772	.0925
W. of Rockies, f.o.b. stockpoints	lb.	.0882	.0975
Carbromal, NF, dms., 100 lb. lots, works	lb.	4.00	4.00
Cardamom, fruit, bleached, cs	lb.	3.75	3.30
medium, cs	lb.	3.30	3.10
decorticated, Alleppey, cs	lb.	2.15	1.70
Guatemala, bgs	lb.	2.25	1.74
Mangalore type, cs	lb.	2.25N	1.95N
green, Alleppey, bgs	lb.	1.80	1.50
Ceylon, bgs	lb.	1.90	1.50
Carmine, No. 40, NF, bulk, 100 lbs. or more, dlvd	lb.	5.50	6.50
Carotene, technical, 1,350,000 A units per gram, tins, works.	gm.	.50	.55
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works	million uits.	.18	.18
microcrystalline in oil, 400,000 A units per gram, tins, works, mill, units.		.30	.33
Carvol, bots.	lb.	7.50	4.75
Cascara, sagrada bark, bulk	lb.	.35	.34
Casein, dom., acid-precip., standard, bgs., 10,000 lbs. or more, ship't, point	lb.	.28	.28
premium, bgs., 10,000 lbs. or more, ship't, point	lb.	.36½	.35
imported, Argentine, acid-precip., grd., 100-bg. lots or more, ex dock	lb.	.19½	.21
Cashewnut shell liquid, treated, dms, c.l., f.o.b. Newark, N. J.	lb.	.21	.22
Cassia, Batavia, cuttings, bls.	lb.	.16	.17¼
longstick	lb.	.20	.19
shortstick, bls	lb.	.17	.18
Saigon, broken bls	lb.	.42	NS
medium, bls	lb.	.45	1.25
thin, bls	lb.	.50	NS
Castor beans, bgs., f.o.b., Brazilian ports	long ton.	NP	105.00N
Pomace, bgs., c.l., works.	ton.	37.25	25.00
Castoreum, artificial, cns	lb.	9.00	9.00
natural, cns	lb.	7.00	7.10



If Karl Wilhelm Scheele, brilliant Swedish chemist and discoverer of Chlorine, had envisioned only a fragment of the importance of this chemical to mankind, he might well have hung such a sign outside his modest eighteenth century pharmacy.

Scheele made his discovery during his analysis of manganese dioxide. He named it "Dephlogisticated Marine Acid Air," because he was a believer in the phlogiston theory of chemistry. His find remained a laboratory curiosity for years, and its identity as Chlorine and its remarkable potentials were not realized until about 1810 when it was proved to be an element.

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DIOCTYL PHTHALATE
DIBUTYL PHTHALATE
DIETHYL PHTHALATE
DICAPRYL PHTHALATE
TRICRESYL PHOSPHATE
ADIPATES
Specially formulated Plasticizers

FOR TEXTILES
CAUSTIC SODA • SODA ASH
ALL PHOSPHATES • ACETIC ACID
GLAUBER SALT •
SODIUM HYDROSULPHITE
BICHROMATE OF SODA
SODIUM PERBORATE • UREA

FOR METALS & PLATING
NICKEL ANODES
CADMIUM ANODES
ZINC ANODES
CADMIUM OXIDE
NICKEL SULPHATE
NICKEL CHLORIDE
NICKEL CARBONATE

FOR METALS & PLATING
DEGREASING TRICHLORETHYLENE
PERCHLORETHYLENE
CARBON TETRACHLORIDE
SODIUM CYANIDE
POTASSIUM CYANIDE
ZINC AND COPPER CYANIDE
CHROMIC ACID •

FOR GLASS, PAPER, PULP
BARIUM CARBONATE
BARIUM CHLORIDE
CAUSTIC SODA • SODA ASH
SODIUM PEROXIDE
SODIUM ALUMINATE
FORMALDEHYDE
IRON-FREE ALUM
SODIUM BISULPHITE

FOR AGRICULTURE
COPPER SULPHATE CRYSTALS
COPPER SULPHATE BASIC
DDT • UREA
MURIATE OF POTASH
SYNTHETIC DETERGENTS
AMMONIUM SULPHATE
DICALCIUM PHOSPHATE
SUPERPHOSPHATE Single & Triple

FOR LACQUERS & PAINTS
ACETONE • MEK • MIBK
ISOPROPYL & ETHYL ALCOHOL
ETHYL & BUTYL ACETATE
TURPENTINE • METHANOL
PLASTICIZERS • LITHOPONE
ETHYLENE DICHLORIDE • GLYCOLS
MONOETHANOLAMINE
DIETHANOLAMINE
TRIETHANOLAMINE

FOR TEXTILE SPECIALTIES
DIETHYLENE & ETHYLENE GLYCOLS
CAUSTIC POTASH & SODA
CARBONATE OF POTASH
ZINC SULPHATE • ZINC CHLORIDE
ACETIC ACID • ALL PHOSPHATES
SODIUM CYANIDE
PHOSPHOROUS TRICHLORIDE
MONOETHANOLAMINE
DIETHANOLAMINE
TRIETHANOLAMINE

Catechol, CP—Copper Undecylenate

		1953	1954
Catechol, CP, cryst., fib. dms., works	lb.	2.17½	2.17½
resublimed, dms., works	lb.	4.29½	4.29½
Catnip, leaves, southern, bls	lb.	.65	.75
Celery seed, French, bgs	lb.	.36½	.47
Indian, bgs	lb.	.27½	.19
Cellulose acetate, flake, ctns., works, dlvd	lb.	.40	.43
extrusion compound, translucent, metallic pearls, special black, dms., c.l., same basis	lb.	.52	.52
molding, composition, translucent, metallic pearls, special black, dms., c.f., frt. alld	lb.	.48	.48
reprocessed, black, dms., l.c.l., same basis	lb.	.43	.43
acetate-butyrate, flake, 17% butryl content, standard cartons, works	lb.	.54	.54
27% butyryl content, low viscosity, standard cartons, works	lb.	.64	.64
38% butyryl content, low viscosity, standard cartons, works	lb.	.68	.68
50% butyryl content, standard cartons, works	lb.	.63	.63
molding composition, plain colors, pearls, transparents, special black, dms., l.c.l., frt. alld	lb.	.64	.64
reprocessed, black, dms, l.c.l., same basis	lb.	.52	.52
Triacetate, flake, ctns., works, frt. alld on 100 lbs. or more	lb.	.50	.50
Cerium hydrate, 74% CeO_2, fib. dms., 50-lb. lots or more	lb.	1.44	1.44
77%, CeO_2, fib. dms., 50-lb. lots or more	lb.	1.60	1.74
Oxalate, NF, bbls., bgs., works.	lb.	NP	1.05
Oxide, optical grade, bgs., 50-lb. lots or more, works	lb.	1.85	1.85
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian and Hungarian style, cs	lb.	.90	.70
Roman, bls	lb.	.80	1.00
Charcoal, activated, NF, fib. dms., c.l., works	lb.	.25	.25
Hardwood, briquettes, bulk, c.l., works	ton.	77.00	77.00
granular, bgs., works	ton.	77.00	77.00
Pinewood, gran., powd., bags., c.l., works, South	ton.	43.50	53.50
lump, bgs., c.l., works, South	ton.	40.00	50.00
Chestnut extract, 25% tannin, tanks, works	lb.	.0425	.0425
powd., 60% tannin, bgs., extra, c.l., works	lb.	.1092	.1092
Chloral, tech., 94% min., tanks, works	lb.	.21	.21
Hydrate, USP, 40-lb. jars, 1,000-lb. lots	lb.	1.30	1.30
Chloramine, T, NF, bbls., works.	lb.	.75	.75
Chlordane, agricultural, dms., pails, c.l. frt. alld	lb.	.65	.65
refined, dms., c.l., frt. alld	lb.	.75	.75
Chlorinated paraffin, 42%, dms., c.l., frt. alld	lb.	.14	.15½
70%, dms., c.l., same basis.	lb.	.18	.18
Chlorinated rubber, 5, 10, 20, cps., ctns., c.l., works.	lb.	.55	.55
125, 1,000 cps., ctns., c.l., works	lb.	.60	.60
Chlorine, liquid, cyls., c.l., works.	lb.	.08¾	.09½
tanks, single units, works, frt. equald	100 lbs.	2.70	2.93
multiple units, 3 cars, works, frt. equald.	100 lbs.	3.20	3.80
Chloroform, tech., tanks, c.l., dlvd. E.	lb.	.17	.17
USP, dms.	lb.	.30	.30
Chloro(4),—2 amino-toluene, bbls.	lb.	1.38	1.38
Chlorophyll, oil soluble, 4%, not fixed, tins, pails, works	lb.	4.25	4.25
copper fixed, 6½%, tins, pails, works	lb.	4.25	4.25
sodium-copper, dms., pails, aqueous sol., 4%, works.	lb.	3.75	3.75
8%, pails, dms, works.	lb.	4.00	4.00
14%, dms., works	lb.	8.90	8.90
concentrated, dom., 50%, dms., works, basis 100%	lb.	56.50	55.00
75%, dms., works, basis 100%	lb.	60.00	45.00
90%-100%, dms., works, basis 100%	lb.	60.00	45.00
imported, 60%, dms., basis 100%	lb.	60.00	58.00
75%, dms., basis 100%	lb.	60.00	58.00
90%, dms., basis 100%	lb.	60.00	58.00
Chloropicrin, com'l cyls., 180 lbs., frt. alld	lb.	.95	.95
Cholesterol, USP, fib. dms., 100-lb. lots	lb.	8.25	6.85
Choline bitartrate, fib. dms., frt. adjusted	lb.	1.70	1.50
Chloride, fib. dms., same basis,	lb.	1.70	1.50
Dihydrogen citrate, fib. dms., same basis	lb.	1.70	1.50
Chromium acetate, solut., 7½%, bbls., works	lb.	.08½	.08½
8½%, bbls., works	lb.	.09	.09
Fluoride, bbls., works	lb.	.44½	.51
Oleate, solid, bbls	lb.	.49	.49
Trioxide, NF, bots.	lb.	.82	.82
Chrysarobin, USP, bots.	lb.	6.50	6.50
Cinchona bark, NF, red, broken, bgs	lb.	.28	.35
yellow, broken, bgs	lb.	.28	.35
Cinchonidine, cryst., cns., 100 oz. lots	oz.	.71	.65
Sulphate, cns., 100 oz. lots	oz.	.37	.37
Cinchophen, NF, heavy density, dms., frt. adjusted	lb.	3.70	3.70
standard density, dms., same basis	lb.	3.50	3.50
Cinchophen-sodium, dms., frt. adj.	lb.	4.50	4.50
Cinnamic aldehyde, NF, cns., dms	lb.	1.05	1.00
Cinnamon, Ceylon, No. 2, bls	lb.	.25½	.40
"0000," bgs	lb.	.36	.50
Citral, bots., cns.	lb.	3.20	3.00
Citronellal, bots., dms.	lb.	1.50	1.50
Citronellol, bots., dms.	lb.	1.80	1.90
Civet, artif., bots.	lb.	13.75	13.75
natural, bots.	oz.	4.75	7.75
Clay, ball, dom., airfloated, bgs., c.l., Tenn.	ton.	—	19.50
crushed, bulk, Tenn	ton.	10.00	10.00
purified, bgs., c.l., Tenn.	ton.	—	20.50
imported, airfloated, bgs., c.l., Atlantic port	long ton.	—	43.00
lump, bulk, Atlantic port	ton.	27.00	27.00
China dom., dry grd., air-float, 99%, 325 mesh, bgs., c.l., Georgia, works	ton.	—	10.00
300 mesh, bgs., c.l., Georgia, works	ton.	13.50	13.50
imported, white, lump, bulk, c.l., ex-dock, Phila., Portland, Me.	gross ton.	—	20.00
powd., bgs., c.l., ex dock	net ton.	50.00	50.00
Clove, Madagascar, bls.	lb.	1.62N	.78
Zanzibar, bls.	lb.	1.54	.80
CMC, purified, high vis. (see Gum, cellulose).			
standard low vis., bgs., 23,000 lbs. or over, works, frt. alld	lb.	.60	.60
medium vis., bgs., 23,000 lbs. or over, works, frt. alld.	lb.	.57	.57
technical, high vis., 58% purity, bgs., 20,000 lbs. or more, dlvd. E., 100% basis	lb.	.56	.56
low vis., 80% purity, bgs., or fib. dms., 23,000 lbs. dlvd. E., basis 100%	lb.	.41	.41
62% purity, bgs., or fib. dms., c.l., dlvd. E., basis 100%	lb.	.41	.41
58% purity, bgs., c.l., dlvd. E., basis net weight	lb.	.34	.34
47½% purity, c.l., dlvd., E., basis 100%	lb.	.41	.41
36½% purity, bgs., c.l., dlvd. E., basis net weight.	lb.	.13½	.13½

Prices for technical grades of CMC West of the Rocky Mountains are 1c. per pound less than delivered E. prices.

Coaltar, crude, resale tanks, ex-whse	gal.	.14	.154
Cobalt acetate, 23.7% Co, bbls., dlvd	lb.	1.14¾	1.30
Carbonate, 48% Co, powd., bgs., dlvd	lb.	1.92¼	2.15
Chloride, 24.2% Co, kgs., dlvd.	lb.	1.10½	1.20
Hydrate, 60-61% Co, bbls., dlvd	lb.	2.52	2.72
Linoleate, fused, 8½% Co, dms.	lb.	.64½	.75¾
liquid, 6% Co, dms	lb.	.53¼	.61
Metal, 97-99% Co, kgs., ex whse	lb.	2.40	2.60
Naphthenate, liq., 6% Co, dms., frt. alld	lb.	.42¾	.48¼
Nitrate, 20.1% Co, bbls., dlvd.	lb.	.99¼	1.06
Oxide, black, 70-71% Co, kgs.	lb.	1.76	1.96
Phosphate, powd., 32.1% Co, kgs., dlvd	lb.	1.57¾	1.69
Resinate, fused, 3% Co, dms.	lb.	.27	.29¾
Sulphate, cryst., 21% Co, kgs., dlvd	lb.	.81¾	.89
monohydrated, 33% Co, dms., dlvd	lb.	1.28½	1.40
Cocaine, USP, cns., 100 oz. lots,	oz.	15.00	15.00
Hydrochloride, cns., 100-oz. lots.	oz.	11.75	11.75
Cochineal, USP, gray, bgs.	lb.	.68	.68
Cocillana bark, bgs.	lb.	.16	.45N
Cocoa butter, bgs.	lb.	.76	1.15
Codeine, NF, cns., 100 oz. lots,	oz.	13.25	13.25
Hydrochloride, cns., 100 oz. lots	oz.	11.75	11.75
Phosphate, USP, cns., 100 oz. lots	oz.	10.25	10.25
Sulphate, USP, cns., 100 oz. lots	oz.	10.75	10.75
Cohosh root, black, bls	lb.	.22	.22
blue, bls.	lb.	.17	.25
Colchicine, USP, bots., cns.	oz.	65.00	35.00
Colchicum root, bls.	lb.	.45	.45
Seed, bgs.	lb.	.80	.80
Collodion, USP, dms.	lb.	.32½	.32½
flexible, USP, dms.	lb.	.34	.34
Colocynth, pulp, bls.	lb.	.30	.25
Colombo root, bls., to arrive	lb.	.22	.20N
Copaiba balsam, cns., dms.	lb.	.90	.85
Copper acetate, bbls., c.l., works	lb.	.34¼	.34¾
Carbonate, 55%, bbls., works.	lb.	.23	.263
Chloride, anhyd., bbls., works.	lb.	.34½	.39
crystals, bbls., works	lb.	.22¾	.26¼
Cyanide, tech., bbls., 1,000-lb. lots or more	lb.	.613	.619
Gluconate, cns., dms	lb.	3.00	3.00
Hydrate, dms., frt. alld. E. Miss.	lb.	.36	.40¼
Metal electrolytic	lb.	.24½	.29½
Naphthenate, liquid, 8% Cu, dms., frt. alld	lb.	.22¾	.21½
Nitrate, tech., cryst., bbls., works	lb.	.25¼	.30½
Oleate, solid, 9% Cu, dms., works.	lb.	.45	.45
Oxide, black, bbls., works	lb.	.39	.39
red, com'l, bbls., c.l., works.	lb.	.43	.42½
Oxychloride, bgs., frt. alld.	lb.	—	.40
Quinolinolate, fib., dms.	lb.	4.25	4.25
Resinate, precip., dms., frt. alld.	lb.	.27½	.27½
Stearate, ton lots, works	lb.	.38½	.37½
Sulphate, cryst., 99%, bgs., c.l., works 100 lbs.		8.95	10.35
CP, gran., bbls., works	lb.	.1615	.1715
monohydrated, 35%, dms., c.l., dlvd. 100 lbs.		14.95	17.10
tribasic, dealers, bgs., c.l., works 100 lbs.		25.60	22.50
USP, gran., cryst., dms.	lb.	2.90	2.90
Undecylenate, dms.	lb.	2.90	2.90

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a change in name
FROM
THE NEVILLE COMPANY
TO
NEVILLE CHEMICAL COMPANY
To more aptly relate our corporate name to the ever-growing field which we have served through the years, and to more readily identity the scope of our products and service, we have changed our name.
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30 ROCKEFELLER PLAZA, NEW YORK 20, N.Y.
Tri-Sure Products Limited, St. Catharines, Ontario, Can.

**The Tri-Sure Trademark is a mark of reliability backed by over 30 years serving industry.*

Copperas—Dyes, Yellow, FD & C, No. 6

	1953	1954
Copperas, gran., bulk, c.l., works, ton.	28.50	34.50
Copra, Atlantic ports, c.i.f. ton.	235.00	220.00
Pacific ports, c.i.f. ton.	230.00	215.00
Coriander seed, Argentine, bgs., lb.	.06½N	.14
Czech, bgs. lb.	.07½	.09
Moroccan, bgs. lb.	.05½	.07
Roumanian, bgs. lb.	.06	.07
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min 100 lbs.	7.31	7.31
Syrup, 42°, dms., c.l. 100 lbs.	7.32	7.32
Cornsilk, bls. lb.	.12	.12
Corrosive sublimate, NF, cryst., dms., 50 lbs. or more lb.	3.68	3.68
gran., powd., dms., 50 lbs. or more lb.	3.53	3.53
Cottonseed hull ash, 32-36% pot-ash, bgs., dlvd unit-ton.	1.50	1.25
Meal, 41% protein, sacked, c.l., Memphis ton.	78.00	65.00
Coumarin, NF, cryst., cns. lb.	2.94	2.94
powder, cans lb.	3.20	3.20
Cramp bark, NF, bls lb.	.80	.85
Cream of tartar, dom., NF, gran. or powd., bbls., 5,000 lbs. one ship't. lb.	.32½	.32½
imported, kgs. lb.	.25¾	.24
Creosote carbonate, NF, bots., cbys lb.	2.80	3.05
Coaltar, crude, tanks, works, frt. adjusted gal.	.20	.22
solution, 80%, tanks works, gal.	.188	.2068
refd., tanks, same basis gal.	.27	.2970
Wood, beechwood, cbys., dms., lb.	1.35	1.60
Hardwood, bots., cbys. lb.	1.05	1.30
Pinewood, dms. gal.	.31	.42½
Cresol, tech., 50% below 204°C, dry above 207°C, wide distillation range, tanks, frt. equald. lb.	.12	.12
USP, tanks, same basis lb.	.13	.13
Crotonaldehyde, 91-93%, l.c.l., works lb.	.24½	.24¼
Cryolite, nat., industrial, bgs., works lb.	.23	.10½
insecticide, dealers, bgs., c.l., dlvd. 100 lbs.	.10½	.14
Cube root, 5 percent rotenone, bgs. lb.	.25	.23
Cubeb berries, XX, NF, bgs. lb.	.45	.50
powd., cs. lb.	.55	.55
Cumene, tanks, works lb.	.11	.11
Cumin seeed, Iranian, bgs. lb.	.14½	.15N
Moroccan, bgs. lb.	.22	.14
Turkish, bgs. lb.	.14	.14
Cutch, extract, 55%, tannin, bgs., exdock, duty extra lb.	.08¼	.08½
Cyanimide, fertilizer mixing grades, 20.6%, N, gran., bulk, Niagara Falls, Ontario, contracts ton.	62.50	55.00
pulv., 21% N, bgs., works, unit-ton.	2.90	2.75
Cyclohexane, tech., tanks, works, gal.	—	.55
Cyclohexanol, tech., tanks, works, frt. alld. E lb.	.23¼	.27
Cyclohexanone, tech, tanks, works lb.	.25	.32
Cyclohexylamine, dms., works lb.	.40	.46½
Cyclopropane, CP, 2-lb. cyls., works cyl.	48.00	48.00
6-oz. cyls., works cyl.	12.00	12.00
USP, hospital, cyls., 200-gal. lots gal.	.36	.36

D

	1953	1954
2,4-D, bbls., c.l., works, frt. equald. lb.	.61	.51
Isopropyl ester, dms., c.l., works lb.	.67	.55
Dandelion root, bls. lb.	.45	.35
DDD, tech., fine grd., fib. dms., c.l., works lb.	.50	.50
DDT, fib. dms., c.l. works, frt. equald. lb.	.43	.27
Decanol, normal, tech., tanks, dlvd. lb.	.419	.32½
Deertongue leaves, bls. lb.	.42	.45
Defluorinated phosphate, 13% P, paper bgs., works ton.	49.25	49.50
17½% P, paper bgs., works, ton.	62.75	56.00
Rock, 14½% P, paper bags, works ton.	50.00	48.00
Degras, common, bbls. lb.	.11	.11
Neutral, less 2% ffa, bbls. lb.	.30½	.26
over 2% ffa, bbls. lb.	.50	.25
Derris root, 5% rotenone, powd. bbls. lb.	.32	.26
Desoxyephedrine hydrochloride dextro, bots. lb.	25.00	25.00
dextro-laevo, bots. lb.	7.50	6.50
Dextrin, corn, gum, paper bgs., c.l. 100 lbs.	8.95	8.95
canary, paper bgs., c.l. 100 lbs.	8.69	8.69
dark, paper bgs., c.l. 100 lbs.	8.79	8.79
white, paper bgs., c.l. 100 lbs.	8.53	8.53
Potato, bgs. lb.	.10½	.10½
Dextrose, USP, dms. lb.	.17¾	.17¾
Diacetyl, flavor grade, bots lb.	4.50	4.50
laboratory grade, bots. 100 gms.	4.50	4.50
tech, bots., works lb.	3.00	3.00
Dianisidin, dms. lb.	1.90	2.00
Diatomaceous earth, dom., bgs., c.l., Atl. coast ton.	52.00	61.00
California ton.	42.00	50.00
purified, bgs., c.l. Atl. coast ton.	65.00	75.00
California ton.	53.00	65.00
imported, Mexican, white, bgs., c.l. Atl. coast lb.	.03	.03
Dibenzyl sebacate, CP, tanks, works lb.	.91	.88
Dibutyl phthalate, tanks, dlvd. E. lb.	.34	.33
Sebacate, tanks, works lb.	.88¼	.75
Tartrate, dms., works, frt. alld lb.	.71	.64
Dibutylamine, tanks, frt. alld. E. of Rockies lb.	.53	.53
Dicapryl phthalate, tanks, frt. alld. E. of Rockies lb.	.53	.32
Sebacate, tanks, works lb.	.76¾	.66½
Dichloroanilin, dms., works lb.	.75	.75
Dichlorodiphenyldichloroethane (see DDD).		
Dichloropentanes, tanks, works, lb.	.04¼	.04¼
Dicyclohexylamine, tanks, works, lb.	.44½	.49¾
Dicyclohexyl phthalate, fib. dms., c.l. works lb.	.60	.60
Dieldrin, dms., frt. alld lb.	2.00	1.80
Diethanolamine, tanks, dlvd., E. lb.	.27½	.27½
Diethyl carbonate, tanks, frt. alld lb.	.45	.45
Maleate, tanks, dlvd. lb.	.48½	.48½
Oxalate, tanks, dlvd. lb.	.40	.40
Phthalate, tanks, dlvd. lb.	.26¾	.25
Sulphate, tanks works lb.	.17	.17
Diethylamine, tanks, dlvd. E lb.	.52½	.48½
Diethylanilin, dms. lb.	.48	.50
Diethyleneglycol, tanks, dlvd. E. lb.	.18½	.15½
Boriborate, dms., l.c.l. lb.	.30½	.30½
Diethylether, dms., l.c.l., works, lb.	.46½	.46½
Monobutylether, tanks, dlvd. lb.	.27	.27
acetate, dms., c.l., works lb.	.30	.30
Monoethylether, tanks, dlvd. lb.	.19½	.19½
acetate, dms., c.l., dlvd. lb.	.26¾	.25¼
Monomethylether, tanks, works, lb.	.23½	.18½
Diethylenetriamine, tanks, dlvd. E lb.	.41½	.41½
Diethylethanolamine, tanks, dlvd. lb.	.65¾	.65¼
Diethylstilbestrol, USP, bots, 10. kilo lots kilo.	150.00	110.00
Digitalis leaves, USP, dom., bbls. lb.	1.10	.90
Digitoxin, USP, bots. gram.	6.50	5.50
Diglycol laurate, dms. lb.	.30½	.31½
Oleate, dms. lb.	.30½	.28½
Stearate, dms. lb.	.25	.25
Dihexyl sebacate, tanks, works, lb.	.74¾	.68
Dihydrazine sulphate, dms., works lb.	1.10	1.10
Dihydrostreptomycin, either hydrochloride or sulphate, bulk, gm.	.21	.17
Dihydroxydichlorodiphenylmethane, tech., dms lb.	1.15	1.15
Di-isobutyl ketone, tanks, works, lb.	.13½	.13½
Phthalate, tanks, dlvd. E lb.	.33	.32
Di-isobutylene, tanks, works lb.	.07½	.07½
Di-iso-octyl phthalate, tanks, dlvd. lb.	.37	.34
Sebacate, tanks, works, lb.	—	.69
Di-isopropylamine, tanks, dlvd. E. of Rockies lb.	.48	.48
Dillseed, dewhiskered, bgs. lb.	.13½	.16
natural, bgs. lb.	.11	.14
Dimethyl anthranilate cns. lb.	5.50	5.25
Chloroacetal, tanks, works lb.	.51	.51
Hydroquinone, dms. lb.	2.25	1.70
Phthalate, tanks, dlvd. lb.	.27½	.27½
Sebacate, tanks, works. lb.	1.30	1.25
Sulphate, 55 gal. ret. dms., c.l., works lb.	.15	.15
Dimethylamine, 25-40%, tanks, works, basis 100% lb.	.33	.33
Dimethylanilin, tanks, frt. alld. lb.	.26	.28¼
Dimethylethanolamine, anhydrous, tanks, dlvd. lb.	1.40	1.40
70%, tanks, dlvd. lb.	.52¼	.53
Dimethylformamide, tanks, works, lb.	.34	.33
Dinitroanilin, dms., frt. equald. lb.	.57	.57
Dinitrobenzene, crude, dms. lb.	.20	.20
purified, dms. lb.	.22	.22
Dinitrochlorobenzene, tanks, frt. alld. E. lb.	.15	.15
Dinitrophenol, bbls. lb.	.34	.37
Dinitrotoluene, oily, dms. lb.	.10	.10
refined, dms. lb.	.21	.21
Dioctyl adipate, tanks, works lb.	.43	.44¾
Phthalate, tanks, frt. alld. lb.	.37	.34
Sebacate, tanks, works, lb.	—	.69
Diorthotolylguanidin, dms., ton lots, dlvd. lb.	.54	.57
Dioxane, tanks, works. lb.	.27	.27
Dipentaerythritol, bgs., l.c.l., works lb.	.37	.37
Dipentene, dest-dist., dms., extra, c.l., works gal.	.49	.49
steam dist., dms., c.l., works, South gal.	.60	.60
Diphenyl, bbls., c.l., works lb.	.15	.15
Oxide perfume grade, cns. lb.	.54	.54
Phthalate, dms., c.l., works lb.	.51¾	.51¾
Diphenylguanidin, dms., ton lots, lb.	.44½	.48
Diphenylhydantoin-sodium, USP, dms. lb.	5.30	5.30
Dipropyleneglycol, tanks, frt. alld. lb.	.15	.15
Methylether, tanks, dlvd. E. lb.	.19¼	.19¼
Di-secondary-amylphenol, tanks, works lb.	.28¼	.28¼
Ditertiarybutylparacresol, dms., c.l., works lb.	.91	.91
Divi-divi, 45% tannin,, bgs., bls., c.l., U.S. ports, ex dock ton.	70.00	70.00N
Divinylbenzene, 20-25%, tanks, works lb.	.19	.19
40-50%, dms., 100% basis, works gal.	1.00	1.00
Dodecylbenzene, tanks, frt. equald. lb.	.12½	.12½
Dyes, coaltar, certified colors for food, drugs and cosmetics, 5-lb. and 1-lb. lots, dlvd:—		
Blue, FD&C, No. 1, cns. lb.	17.00	17.00
No. 2, cns. lb.	17.00	17.00
Green, FD&C, No. 1, cns. lb.	17.00	17.00
No. 2, cns. lb.	22.20	22.20
No. 3, cns. lb.	35.25	35.25
Orange, FD&C, No. 1, cns. lb.	3.65	3.65
No. 2, cns. lb.	4.65	4.65
Red, FD&C, No. 1, cns. lb.	7.55	7.55
No. 2, cns. lb.	4.00	4.00
No. 3, cns. lb.	22.20	22.20
No. 4, cns. lb.	7.20	7.20
No. 32, cns. lb.	5.30	5.30
Violet, FD&C, No. 1, cns. lb.	17.00	17.00
Yellow, FD&C, No. 1, cns. lb.	10.50	10.50
No. 3, cns. lb.	3.30	3.30
No. 4, cns. lb.	3.30	3.30
No. 5, cns. lb.	4.00	4.00
No. 6, cns. lb.	4.00	4.00

THE VERSENES® "Versene" is the registered trade mark of certain synthetically prepared polyamino acids and their salts. As products of modern chelate chemistry, they form soluble, non-ionic chelates with polyvalent metallic ions and completely change their properties so that they can no longer react with other materials and be precipitated from solution by common precipitating agents.

NOW THERE ARE ELEVEN

VERSENE REGULAR (The original Versene) inactivates all metallic ions but is not especially effective for chelating iron in *alkaline* solutions, yet it is the best iron chelating agent for use in *acidic* solutions.(liquid or powder).

VERSEN-OL is the trisodium salt of N-hydroxyethylethylene diamine triacetic acid*. It is a very effective agent for chelating trivalent iron from pH7 to pH10. It forms strong 1:1 ferric chelates. After chelating the iron it will then chelate other heavy metal or alkaline earth ions.(liquid or powder).

VERSENE Fe_3 SPECIFIC is the most powerful complexing agent known for *iron* in the alkaline pH range. It also chelates copper, nickel, cobalt and zinc (47% solution).

VERSENE Fe_3 is a combination of VERSENE and VERSENE Fe_3 SPECIFIC. It complexes both iron and other metallic ions.(liquid or powder).

VERSENE-T complexes ferric and divalent metal ions including hard water salts in *any* caustic solution (55.5% solution).

VERSENE-9. This is the trisodium salt of EDTA. It has a pH of 9.3 in solution at 1% concentration. 1 gram complexes a minimum of 242 mgms. of $CaCO_3$. Its general chemical reaction is identical to Versene Regular.

VERSENE IRON CHELATE is an agricultural Versene to correct iron deficiency and cure chlorosis in citrus and other green growth occurring in *acid* soils. It is the disodium iron chelate of EDTA absorbed into inert vermiculite for convenience in application (50 lb. bags).

VERSEN-OL IRON CHELATE for agriculture is the monosodium iron complex of Versen-OL. It contains 19% min. of iron chelate calculated as NaFe EEDTA*, (4.29% Fe as Fe_2O_3). Balance inert. Cures iron deficiency in plants growing in *any* soil (50 lb. bags).

DISODIUM VERSENATE DIHYDRATE (dry powder) an Analytical Reagent grade of Versene Regular for research and analytical purposes.

VERSENATE INDICATOR (alcohol solution). Color indicator for Versenate method of water analysis.

CALCIUM DISODIUM VERSENATE (25% solution). Chemically Pure grade material for use as stabilizers in drugs, vitamins, pharmaceuticals.

LEAD DISODIUM VERSENATE (34% solution). Preformed complex for use in vinyl plastic emulsions.

The Versenes give you mole-for-mole control over cations in solution. They are made only by the Bersworth Chemical Company under processes originated, developed and patented by F. C. Bersworth. Quality-control over manufacture is so high that uniform complexing power is guaranteed.

VERSENES® — MADE FOR YOU — Gladly will we share with you our quarter-century of experience in pioneering the polyamines. Samples for experiment will be provided on request and without obligation. Ask for Technical Bulletin #2. Chemical Counsel available. Write Dept. F. Send for prices.

*PATENT PENDING

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Houston, Dallas, Corpus Christi, New Orleans, St. Louis, Wichita, Oklahoma City, Tulsa, Kansas City, Mo.

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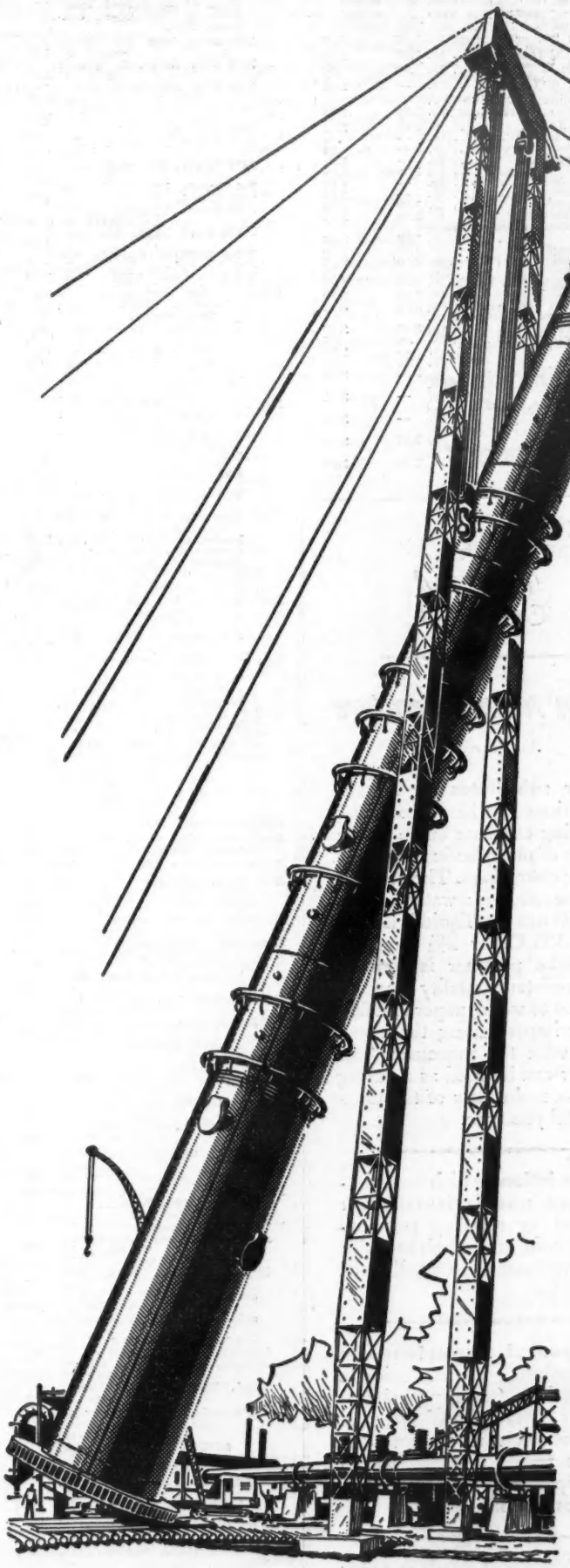
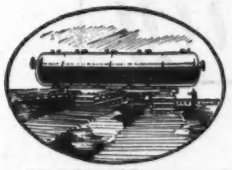


Some Jobs Are Different!

Your requirements may never call for the erection of a Hypersorber (for separating light hydrocarbon gases), 207 ft. high and weighing 300 tons. Recently, however, Austin was called upon for just such a heavy-duty job and accomplished the actual erection in less than a day!

In Florida, in erecting a cement kiln 428 ft. long and weighing 482 tons, Austin Engineers greatly reduced the time required by devising a unique gantry crane, mounted on flat-cars, for handling the 36 to 69-ton sections and raising them 30 ft. into place.



On the West Coast, in connection with the design and construction of jet aircraft laboratory facilities, Austin Engineers erected two accumulators, each 60 ft. long and weighing 112 tons, in record time.

In Eastern Pennsylvania, in connection with the design and construction of aboveground facilities for an ore mine, Austin Engineers recently replaced a temporary wooden headframe with a pre-built steel headframe 135 ft. high and weighing 200 tons. The heavy, 67-ft. move was made in three hours and 20 minutes. Result: only a two day mine shutdown instead of six weeks.

Yes, some jobs are different . . . particularly in the chemical and process industries where Austin Engineers, starting with flow sheets provided by the Owner, analyze the problem as an *operation*, then design smooth-flowing facilities which result in the most practical material handling methods and *low annual operating costs.*

In the design and construction of new manufacturing space or warehouse facilities, Austin Engineers provide large, unobstructed areas, unusual flexibility to permit changes in layout, practical material handling, uniform lighting, better ventilation, greatly reduced heating costs and low maintenance expense—*all at no premium in building costs!*

In addition to designing and building new plants, or extensions to existing facilities, Austin also offers several specialized services including *Engineering and Economic Studies* covering (1) Analysis of Existing Plant Facilities; (2) Merchandising, Warehousing and Distribution Facilities; (3) Material Handling; (4) Plant Layout; and (5) Plant Location Studies.

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Dyes. Black. D&C. No. 1—Ethyleneglycol. Monoethylether Acetate

	1953	1954
Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50-lb. lots, dlvd:—		
Black, D&C. No. 1, cns.	lb.10.95	10.95
Brown, D&C, No. 1, cns.	lb.16.10	16.10
Green, D&C. No. 5, cns.	lb.16.10	16.10
No. 6, cns.	lb.16.10	16.10
No. 7, cns.	lb.14.80	14.80
Orange, D&C. No. 3, cns.	lb.10.95	10.95
No. 4, cns.	lb.20.50	20.05
No. 5, cns.	lb. 5.70	5.70
No. 10, cns.	lb.20.50	20.70
Red, D&C. No. 8, cns.	lb. 2.35	2.85
No. 9, cns.	lb. 2.85	2.85
No. 10, cns.	lb. 2.30	2.30
No. 11, cns.	lb. 1.85	1.85
No. 12, cns.	lb. 2.65	2.65
No. 17, cns.	lb.10.95	10.95
No. 18, cns.	lb.24.00	24.00
No. 19, cns.	lb.15.45	15.45
No. 21, cns.	lb. 3.60	3.60
No. 22, cns.	lb.10.95	10.95
No. 28, cns.	lb.24.65	24.65
No. 33, cns.	lb.17.45	17.45
Violet, D&C. No. 2, cns.	lb.16.10	16.10
Yellow, D&C, No. 7, cns.	lb.10.95	10.95
No. 10, cns.	lb.13.50	13.50
No. 11, cns.	lb.13.50	13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, in 1-lb. lots, works, 25-50-lb. lots, dlvd:—		
Blue, Ext. D&C. No. 1, cns	lb.16.10	16.10
Green, Ext. D&C, No. 1, cns	lb.16.10	16.10
Red, Ext. D&C. No. 1, cns	lb.13.50	13.50
Yellow, Ext. D&C. No. 1, cns	lb.10.95	10.95

	1953	1954
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype) contract, dlvd:—		
20 Chrysoidine Y	lb. .64	.74
27 Fast light Orange 2G	lb. .78	.90
31 Phloxine, 2G	lb. .64	.74
36 Yellow, 2G	lb. .83	.83
40 Orange R extra, conc	lb. 1.06	1.06
57 Fuchsine 6B	lb. .98	1.06
79 Scarlet, 2R	lb. .74	.81
151 Orange, AD	lb. .46	.55
161 Orange, RR	lb. .55	.66
176 Fast red, A	lb. .90	.99
179 Rubine XX, conc.	lb. 1.04	1.14
180 Blue, F4B	lb. .92	.92
185 Brilliant Scarlet 3RN, conc	lb. .93	.93
202 Chrome blue black, conc.	lb. .68	.75
203 Chrome black T	lb. .71	.78
208 Fast blue, SR	lb. .91	.91
216 Chrome red, B	lb. .84	.84
234 Brown Y	lb. .89	.98
246 Blue black, extra conc.	lb. .86	.95
275 Milling red, 3R. conc	lb. 2.03	2.03
289 Navy blue, 3R, conc.	lb. 1.08	1.19
299 Black F, conc	lb. 1.40	1.54
304 Neutral black 2B, conc., 200%	lb. 2.01	2.01
326 Fast scarlet, 4BNC	lb. 1.64	1.64
332 Bismarck brown, RX, conc	lb. .86	.95
365 Brilliant yellow, conc	lb. 2.34	2.57
382 Scarlet, B	lb. 1.65	1.82
401 Diazo black, BHD	lb. .63	.69

	1953	1954
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd.		
406 Blue, 2B, extra, conc	lb. 1.07	1.07
419 Red FC conc	lb. 1.12	1.12
420 Brown M	lb. .90	.98
448 Red, 4BX, conc	lb. —	1.30
518 Diamine sky blue FF, extra, conc	lb. 1.50	1.50
561 Brown, B	lb. 2.03	2.03
581 Direct black, EB	lb. —	.94
593 Green BY, conc	lb. —	.72
620 Yellow 2G	lb. —	1.01
639 Fast yellow 2G	lb. 1.79	1.79
640 Yellow XX	lb. —	1.61
655 Yellow OX	lb. —	2.04
657 Green V	lb. 1.70	2.10
662 Brilliant green, G	lb. 2.79	2.79
667 Brilliant milling green 6B, conc	lb. 3.68	3.68
671 Blue, EG	lb. 1.73	1.70
681 Crystal violet powder	lb. 2.15	2.15
698 Violet 4BXN	lb. —	.74
720 Brilliant blue, BBG	lb. —	1.88
729 Blue B conc	lb. 2.79	2.79
814 Yellow, NN. conc	lb. 3.11	3.11
841 Safranine GF extra, conc.	lb. 2.90	3.17
865 Nigrosine WSJ	lb. .68	.75
922 Blue, GXX	lb. —	1.71
978 Black, GXCF, conc.	lb. .32	.32
1034 Alizarine, red SC	lb. 2.59	2.59
1054 Alizarine, blue, SAPX	lb. —	2.91
1078 Alizarine, green, CG, extra	lb. —	2.72
1085 Alizarine, blue-black B,	lb. 2.33	2.33
1096 Golden orange, GFD, single paste	lb. 2.00	1.99

	1953	1954
Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd.		
1099 Dark blue BO, single paste	lb. 1.75	1.75
1101 Jade green, N, double paste	lb. 2.36	1.98
1106 Blue RS, double paste	lb. 2.57	2.96
1113 Blue ELFD, double paste	lb. 1.75	2.25
1150 Olive R, single paste	lb. 1.10	1.10
1151 Brown R, single paste	lb. 1.68	1.76
1217 Orange RD, single paste	lb. 1.65	1.65
P-4 Brown, PG	lb. 2.30	2.30
P-14 Brown, EB	lb. 1.31	1.51
P-80 Diazo brilliant scarlet ROAD	lb. 2.79	2.79
P-202 Diazo black VJ, conc.	lb. 1.58	1.74
P-244 Brilliant scarlet, BN.	lb. 1.31	1.31
P-313 Naphthol SWF	lb. 2.42	2.42
Dyes, coaltar, for stains, oil-soluble, 100-lb. dms., sellers' works.		
Black, blue No. 550	lb. .81	.81
Jet, No. 551	lb. .89	.89
Brown, R, conc.	lb. 1.72	1.72
Orange R, brilliant	lb. .90	.90
Red, 4B, conc	lb. 1.37	1.37
Yellow, C	lb. 1.18	1.18
FN, conc	lb. 1.22	1.22
Dyes, coaltar, for stains, spirit-soluble, 100-lb. dms., sellers' works—		
Auramine, O	lb. 1.85	1.85
Black, basic, blue	lb. 1.21	1.21
Jet	lb. 1.21	1.21
Blue, methylene, 2B, conc.	lb. 1.55	1.71
Brown, Bismarck R, conc.	lb. .86	.86
Chrysoidine, R, extra	lb. .60	.60
Y, extra	lb. .64	.64
Fuchsine, conc	lb. 3.08	3.08
Green, malachite, conc.	lb. 2.10	2.10
Rhodamine, B	lb. 4.33	4.33
Safranine, Y, conc	lb. 2.90	2.90
Violet, methyl B	lb. 1.10	1.10
Dyes, coaltar, for stains, water-soluble, 100-lb. dms., sellers' works—		
Azo rubine R, extra, conc.	lb. 1.04	1.04
Black, acid blue, B, extra	lb. .86	.86
Fast light, 3G, extra	lb. 2.04	2.04
Methanil, conc	lb. .91	.91
Orange, acid, Y, conc	lb. .47	.47
Scarlet, croceine, MOO	lb. 1.45	1.45
Yellow, azo-, conc	lb. .90	.90

Oil-soluble, spirit-soluble, water-soluble dyes in kegs, 3c. higher; tins, 10c. higher.

E

Echinacea root, bls	lb.	.90N	1.25
Egg yolk, dried dom., bbls	lb.	.95	1.48
tanners, bbls	lb.	.06	.06½
Elder flowers, bright, bls	lb.	.30	.35
Elm bark, grinding, bls	lb.	.23	NP
powd., bbls., bxs	lb.	.46	.60
select, bndls	lb.	.60	.65
Emetine hydrochloride, USP, bots	oz.	35.00	32.95
Ephedrine, synthetic, USP, anhyd., bots., 100-oz. lots.	oz.	.98	.98
hydrous, bots., 100-oz lots.	oz.	.92	.92
Hydrochloride, tin, 100 ozs.	oz.	.75	.75
Sulphate, cryst., tins, 100 ozs.	oz.	.72	.72
powd., tin, 100 ozs	oz.	.73	.73
Epichlorhydrin tanks, works	lb.	.37	.37
bots	oz.	35.00	32.95
Epinephrine, syn., USP, bots., 100 grams	gram	.45	.45
Epsom salt, tech., bgs., c.l., works 100 lbs.		2.15	2.15
USP, cryst., bgs., c.l., works. 100 lb.		2.35	2.35
Ergosterol, unirradiated, cryst. kilo.		150.00	150.00
Ergot, NF, dms., tin-lined	lb.	2.50	3.50
Eserine bots	oz.	45.00	45.00
Salicylate, USP, bots	oz.	32.50	29.75
Sulphate bots	oz.	34.50	34.50
Ether, butyl, tanks, works	lb.	.30	.30
Dichloroethyl, reftd., tanks, frt. alld. E	lb.	.16	.13
tech., tanks, works	lb.	.12	.12
Ethyl, absolute, ACS, dms.	lb.	.37	.37
anesthesia, USP, hospitals, 1-lb. cans	lb.	.89	.89
solvent, USP, tanks, dlvd.	lb.	.13¾	.13¾
synthetic, tanks, dlvd. E	lb.	.13¾	.10
Isopropyl, tanks, dlvd	lb.	.05	.05
Nitrous, conc., bots., 100 lots	lb.	1.28	1.28
Vinyl, USP, anesthesia, 75cc. hospital, bots	lb.	1.56	1.56
Ethyl acetate, natural, fermentation, 85-88%, tanks, frt. alld	lb.	.11	.11
95-98%, tanks, frt. alld.	lb.	.11¼	.11¼
99%, tanks, frt. alld	lb.	.11½	.11½
synthetic, 85-90%, tanks, frt. alld	lb.	.11	.11
95-98%, tanks, frt. alld	lb.	.11¼	.11¼
99%, tanks, frt. alld	lb.	.11½	.11½
Acetoacetate, dms., c.l., dlvd.	lb.	.55	.55
Acrylate, tanks, works	lb.	.48	.42¾
Benzoate, cns., dms	lb.	.74	.74
Bromide, tech., 98%, dms	lb.	.43	.43
Butyrate, works	lb.	.80	.80
Chloride, tech., tanks, works.	lb.	.10	.10
USP, bbls., cyls	lb.	.22	.22
Cinnamate, cns.	lb.	2.28	2.71
Formate, dms.	lb.	.60	.60
Gallate, dms., 100 to 2,000-lb. lots	lb.	3.90	3.90
Iodide, bots., works	lb.	4.13	3.30
Methacrylate, dms., c.l., and truckloads, works	lb.	.50	.50½
Oenanthate, dms.	lb.	1.00	1.00
Silicate, 40% available SiO_2, dms., works	lb.	.60½	.54½
Ethylbenzene, 99%, tanks	lb.	.13	.18½
Ethylbutyl ketone, tanks	lb.	.32	.34
Ethylcellulose, vis. 7 cps. bgs., 5,000-lb. lots or more, works	lb.	—	.70
vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, works	lb.	.65	.65
Ethylene dichloride, tanks, dlvd. E	lb.	.10	.09
Oxide, tanks, dlvd. E	lb.	.19	.16¼
Ethylenediamine, 76%, tanks, works	lb.	.47	.44
Ethyleneglycol, tanks, frt. alld. E	lb.	.17	.14½
Monobutylether, tanks, dlvd.	lb.	.21	.18½
Monoethylether, tanks, works.	lb.	.18½	.18½
acetate, tanks, dlvd	lb.	.16½	.16½

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Ethylene Dichloride
Diethylene Glycol
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Triethanolamine
Nonyl Phenol
Morpholine
Ethylene Carbonate
Propylene Carbonate

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Briefs

From recent literature

No. 5 in a Series

Rubber substitutes for certain applications can be prepared by vaporizing ethylene oxide into a mixture of phosphoric anhydride and dry chloroform. The product of this reaction is a water-soluble liquid. When this liquid is heated at 130-135°C. for 2½ hours, a rubber-like polymer is formed. Flame-resistant quality can be imparted to wood, paper and fabrics by impregnating these materials with the monomer. The polymer can be used as a curing agent on resin films of the urea-formaldehyde type.

Sun-tan lotions which are odorless and non-irritating are prepared by reacting p-aminobenzoic acid and ethylene oxide in the presence of an alkali metal hydroxide.

Tertiary-alkyl mercaptans can be reacted with ethylene oxide to produce beta (tertiary-alkylthio) ethanols. These ethanols are used in diesel fuels to improve the cetane number, as plasticizers in the preparation of lube oil additives and as insecticides.

A condensate of ethylene oxide and a fatty acid containing from 12 to 18 carbon atoms or a condensate of ethylene oxide and castor oil is used in the hydration of sorbitan monostearate. These condensates impart emulsifying and whipping properties to the sorbitan monostearate when it is used with hydrogenated vegetable oils in cake batter.

These developments are abstracted from recent publications or U. S. patents. They may suggest applications of Jefferson Ethylene Oxide in your products or processes.

	1953	1954
Ethyleneglycol, monomethylether, tanks, works	lb. .21	.18½
acetate, tanks, works	lb. .27	.27
Monostearate, triple pressed dms.	lb. .30	.31
Ethylethanolamine, mixed, tanks, frt. alld. E. Miss.	lb. .40	.40
Ethylmorphine hydrochloride, USP, bots.	oz. 11.85	11.85
Ethylvanillin, cns., 25-lb. lots	lb. 6.75	6.75
Eucalyptol, USP, cns., dms.	lb. 1.45	1.40
Eugenol, pure, USP, bots.	lb. 2.25	2.35
Euphorbia herb, bls.	lb. .12	.13

F

Feldspar, enamel, 100 mesh, bulk, works	ton. 20.00	20.00
glass, 20 mesh, ton lots, bulk, works	ton. 11.75	11.75
pottery, bulk, c.l., works	lb. 18.00	18.00
Fennel seed, Czech, medium, bgs.	lb. .19½	.11
French, bgs.	lb. .29	.34N
Fenugreek seed, Moroccan, bgs.	lb. .06½	.07
Ferrous gluconate, NF, dms.	lb. .88	.68
Fir balsam, Canada, cns.	gal. 34.00	34.00
Oregon, bbls.	gal. 2.85N	NP
Fishmeal, ground, domestic, 60% protein, bulk, Balto area	ton. 135.60	134.00
Fishscrap, dried, 60% protein, bulk, Balto, area	ton. 130.00	129.00
Fluorspar, acid grade, domestic, bulk, c.l., mines	ton. 60.00	60.00
ceramic grade, 93-96% CaF_2 grd., bulk, c.l., mine	lb. 37.50	57.50
85-92% CaF_2, grd., bulk mine,	ton. 47.00	47.00
metallurgical grade, briquets, pellets, 65% CaF_2, bulk, c.l., mine	ton. 40.00	34.00
washed gravel, 59-60%, effective CaF_2, bulk, mine. c.l.	ton. 40.00	40.00
60-65% effective CaF_2, bulk, mine	ton. 40.00	40.00
65-70% effective CaF_2, bulk, mine, c.l	ton. 42.00	42.00
70% or better effective CaF_2, bulk, mine, c.l	ton. 42.00	43.00
Formaldehyde, NF, (inhibited), tanks, E., works	lb. .0420	.0420
methanol-free, (uninhibited), tanks, works.	lb. .0395	.0395
Fringetree bark, bls.	lb. .53	.60
Fuller's earth, dom., powd., bgs., c.l., Fla., Ga., mines	ton. 38.50	21.25
Illinois mines	ton. 37.20	19.00
spent, bulk, Bayonne	ton. 2.00	4.50
imp., bgs., c.l.	ton. 30.00	42.00
Furfural, tech., tanks, works.	lb. .103	.11½
Fusel oil, refined, tanks, dlvd.	lb. .15	.15
Fustic extract, cryst., No. 1, bbls., l.c.l.	lb. .47½	.47½
No. 2, bbls., l.c.l.	lb. .45½	.45½
No. 3, bbls., l.c.l.	lb. .43½	.43½
liquid, No. 1, bbls., l.c.l	lb. .22½	.22½
No. 2, bbls., l.c.l.	lb. .21½	.21½
No. 3, bbls., l.c.l	lb. .19	.19
solid, No. 1, bxs., l.c.l.	lb. .45	.45

G

G salt, bbls., frt. alld., basis 100%	lb. .73	.73
Gammapicoline, 95%, dms., c.l., works	lb. 1.00	2.65
Gasoline at refinery, ex tax Arkansas, 80 octane tanks.	gal. .1075	.115
Group 3, 84 octane, tanks.	gal. .1062	.1125
Gulf coast, 83 octane, tanks.	gal. .1150	.10625
N. Y. Harbor, 86 octane, tanks	gal. .1285	.1365
Pennsylvania, western, U.S. motor, 86 octane, leaded tanks	gal. .129	.1375
natural, group 3, 26-70 octane, tanks	gal. .06875	.055
Gelatin, edible, pure (pork skin), 75 Bloom test, fib. dms., c.l.	lb. .57	.52
150 Bloom test, fib. dms., c.l.	lb. .65	.63
200 Bloom test, fib. dms., c.l.	lb. .71	.69
225 Bloom test, fib. dms., c.l.	lb. .74	.72
275 Bloom test, fib. dms., c.l.	lb. .82	.79
Gelsemium root, bls.	lb. .26	.28
Gentian root, bls.	lb. .17	.17
grd., bbls., bxs.	lb. .22	.22
powd., bbls., bxs.	lb. .23	.23
Geraniol, extra, cns., dms.	lb. 1.40	1.40
standard, cns., dms.	lb. .60	.80
Geranyl acetate, cns.	lb. 1.30	1.40
Ginger oleoresin, NF, from African root, bots.	lb. 4.00	4.00
from Jamaican root, bbls.	lb. 5.00	5.00
Root, African, bls.	lb. .13½	.15
Jamaica, No. 1, bgs.	lb. .24	.19
No. 2, bgs.	lb. .17	.17
No. 3, bgs.	lb. .15½	.16
Rhattoon, bgs.	lb. .15	.15
Nigerian, split, bgs.	lb. .11	.14½
Glauber's salt, anhyd. (see Sodium sulphate).		
cryst., bgs., c.l., works.	100 lbs. 2.25	2.25
Bone glue, l.c.l. prices, 1c. higher than c.l.		
Glue, bone, extracted, 66 jellygrams, bgs., c.l., dlvd.	lb. .24½	.22½
86 jellygrams, same basis.	lb. .23	.23
104 jellygrams, same basis.	lb. .25½	.23½
131 jellygrams, same basis.	lb. .26	.24
164 jellygrams, same basis.	lb. .26½	.24½
191 jellygrams, same basis.	lb. .27	.25
222 jellygrams, same basis.	lb. .28	.26
packers' 40 jellygrams, bgs., c.l., dlvd.	lb. .21½	.18½
65 jellygrams, same basis.	lb. .22½	.19½
86 jellygrams, same basis.	lb. —	.20
115 jellygrams, same basis.	lb. .24	.20½
135 jellygrams, same basis.	lb. .25	.21½
164 jellygrams, same basis.	lb. .26	.22
renderers, 110 jellygrams, bgs., c.l., dlvd	lb. .22	.20
Hide, 70-84 (jellygrams), bgs., c.l., dlvd.	lb. .27½	.22
95-121, bgs., c.l., dlvd.	lb. .27½	.22½
122-149, bgs., c.l., dlvd.	lb. .29½	.24
150-177, bgs., c.l., dlvd.	lb. .31	.26
178-206, bgs., c.l., dlvd.	lb. .31	.28
207-236, bgs., c.l., dlvd.	lb. .32	.32
237-266, bgs., c.l., dlvd.	lb. .33	.33½
267-296, bgs., c.l., dlvd.	lb. .34	.33½
299-330, bgs., c.l., dlvd.	lb .35	.35
331-362, bgs., c.l., dlvd.	lb. .36	.36
363-394, bgs., c.l., dlvd.	lb. .37	.37

	1953	1954
Glue, hide, 395-427 (jellygrams), bgs., c.l., dlvd.	lb. .39	.38
428-460, bgs., c.l., dlvd.	lb. .40	.40
461-494, bgs, c.l., dlvd.	lb. .41	.42
495-529, bgs, c.l., dlvd.	lb. .42	.44
Hide glue l.c.l. prices 1c. higher than c.l.		
Glycerin, crude, saponification, 88%, to refiners, tanks, dlvd	lb. .32N	.30
soaplye, 80%, tanks, dlvd.	lb. .29N	.18
dynamite, tanks, dlvd.	lb. .43¼	.34
high gravity, tanks, dlvd.	lb. .43½	.34
refined, BP, 98%, tanks, dlvd.	lb. .45⅛	.34
USP, CP, 95%, tanks, dlvd.	lb. .44	.33
yellow, distilled, dms., c.l., dlvd.	lb. .43⅜	.34
Glyoxal, 30%, tanks, works.	lb. .18	.18
Gold chloride, acid brown, bots.	oz. 22.50	22.50
acid yellow, bots.	oz. 20.00	20.00
Goldenseal root, NF, tested, bls.	lb. 3.00	2.25
powd., bxs.	lb. 3.25	2.75
Graphite, amoph., powd., bgs., fib. dms., ex whse	lb. .05	.06
crystalline, 88-90%, powd., bgs., fib. dms., ex whse.	lb. .19	.19
90-92%, powd., bgs., fib. dms., ex whse	lb. .21	.21
95-97%, powd., bgs., fib. dms., ex whse	lb. .29	.29
flake, No. 1, 90-95%, bgs., fib. dms., ex whse	lb. .29	.29
No. 2, 90-95%, bgs., fib. dms., ex whse.	lb. .29	.29

Ethyleneglycol, Monomethylether—Gum, Dammar, East India, Pale, Nubs

	1953	1954
Grease, brown, dlvd.	lb. .03½	.05⅝
house, loose	lb. .04½	.06
white, choice	lb. .05⅝	.09½N
yellow, loose	lb. .04¼	.06⅛
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works	lb. 4.50	5.10
tungstated, PMA, kgs., works,	lb. 6.30	6.20
Chrome, CP, dark, light, medium, blue content up to 5 to 30%, bbls., dlvd., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb. .37	.38
16-30%, bbls., same basis.	lb. —	.39
31-45%, bbls., same basis.	lb. .37	.40
45-49%, bbls., same basis.	lb. —	.43
50%, bbls., same basis	lb. .40	.43
reduced color, 25%, bbls., same basis	lb. 17¼	.19
Chromium oxide, hydrated, bbls., dms., c.l., frt. alld.	lb. .95	1.00
pure, c.l., bgs., frt. alld.	lb. .37½	.39¼
Malachite, straight, PTMA, bbls, works	lb. 4.50	4.80
Phthaloncyanin toner, bbls., works.	lb. 4.40	3.95
resinated, bbls	lb. 4.00	3.50
water dispersable	lb. 1.71	1.71
Pigment B, kgs.	lb. 1.35	1.35
Grindelia robusta herb, bls.	lb. .38	.44

	1953	1954
Guaiacol, cryst., tins	lb. 1.90	2.10
Liquid, NF, bots., cbys.	lb. 2.15	2.30
Carbonate, dms.	lb. 3.15	3.40
Gum, Arabic, amber, sorts, bgs.	lb. .14	.15½
powdered, USP, bbls.	lb. .19	.20
Benzoin, Sumatra, cs.	lb. .38	.38
Cellulose, bgs., 23.000 lbs. or more, works, frt. alld.	lb. —	.60
Copal, Congo, No. 1, bgs.	lb. .21	.19
No. 2, bgs.	lb. .19	.16
No. 3, bgs.	lb. .17½	.14½
Manila C, bgs.	lb. .27	.34
CEB, bgs.	lb. .22	.22½
DBB, bgs.	lb. .14	.20
DK, bgs.	lb. .13	.14
dust, bgs.	lb. .11	.11
soft, MA, bgs.	lb. .13	.14½
WS, bgs.	lb. .27	.27
Philippine, pale, chips, bgs.,	lb. .18	.19
nubs, bgs.	lb. .27	.29
seeds, bgs.	lb. .15	.13
sorts, bgs.	lb. .18	.15
Pontianak, chips, bgs.	lb. .22	.20
nubs, bgs.	lb. .36	.30
Dammar, Batavia, A/E, bgs.	lb. .24	.27
dust, bgs.	lb. .14	.16
E, bgs.	lb. .16	.18
East India, batu, bold, bgs.,	lb. .12	.14½
nubs & chips, bgs.	lb. .08	.08½
black, bold, bgs.	lb. .14½	.14½
unscraped, bgs.	lb. .12	.11
nubs & chips, bgs.	lb. .11	.11
pale, chips, bgs.	lb. .13	.13
nubs, bgs.	lb. .19	.18

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Gum, Dammar, Singapore, No. 1—Lead Phthalate

	1953	1954
Gum, dammar, Singapore, No. 1, bgs..lb.	.35	.38
No. 2, bgs..lb.	.29	.29
No. 3, bgs..lb.	.16	.16
dust, bgs..lb.	.14	.16½
seeds, bgs..lb.	.16	.18
Ester, gum-rosin type, dms., c.l., divd. Ill., Ind., Ky., Mich., Mid Atl. States, N. E. States, Minneapolis, N. C. Ohio, St. Louis, St. Paul, Va., W. Va. ....lb.	.14	.16
wood-resin type, dms., c.l., divd. Ill., Ind., etc..lb.	.14	.15½
Karaya, NF, powd., No. 1..lb.	.30	.30
No. 2..lb.	.22	.24
No. 3..lb.	.19	.20
Kauri, bgs..lb.	.30	.30
Locust bean, powd., bgs....lb.	.30	.30
Myrrh, cs..lb.	.30	.38
Olibanum, siftings, cs.....lb.	.16	.15
tears, cs..lb.	.20	.22
Tragacanth, No. 1, cs.....lb.	2.85	2.85
No. 2, cs..lb.	2.45	2.45
No. 3, cs..lb.	1.60	1.60
Powdered, USP, bbls.....lb.	1.25	1.25
Gypsum, plaster of paris, 100-lb. paper bags, trucks, divd. N.Y.C..ton.	—	20.30
Terra alba, domestic, same basis..ton.	—	19.00
works, N. Y. C.....ton.	14.40	16.00
imported, English 100-lb. pe- per bags, ex dock, N. Y. C. ton.	48.00	55.00
ex warehouse.....ton.	53.00	60.00

H

	1953	1954
Hawthorne berries bgs.....lb.	.30	.28
Heliotropin, cryst., cns.....lb.	3.10	3.25
Hellebore root, dom., green, bls. lb.	.60	.55
Helonias root, bls.....lb.	1.65	1.75
Hematine extract, cryst., No. 1, bbls., l.c.l..lb.	.47	.47
No. 2, bbls., l.c.l.....lb.	.43	.43
No. 3, bbls., l.c.l.....lb.	.41	.41
No. 4, bbls., l.c.l.....lb.	.39	.39
No. 5, bbls., l.c.l.....lb	.37	.37
paste, No. 1, bbls., l.c.l.....lb	.20½	.20½
Henbane leaves, bls.....lb.	.35	.40
Heptane, industrial, Bayonne, N. J., tanks..gal.	.18	.19
Hesperidin methylchalcone, bots., works..lb.	50.00	50.00
Hexachlorophene, dms.....lb.	2.60	2.60
Hexamethylenetetramine, tech., bgs., 1,000-pound lots, Perth Amboy or N.Y.C. lb.	.232	.232
USP, dms., 500 pounds or more, same basis..lb.	.40½	.40½
Hexane, industrial, Bayonne, N. J., tanks..gal.	.18	.19
Hexanol, normal, tanks, works, lb.	.33	.33
Hexyl cinnamic aldehyde, dms. lb.	2.25	2.25
Salicate, dms.....lb.	1.75	1.75
Hexyleneglycol, tanks, divd..lb.	.14	.14
Hexylmethacrylate, normal, dms., less than truckloads, works, lb.	.71	.71
Hexylresorcinol, USP, dms., 50-lb. lots or more, divd..lb.	15.00	14.00
Histamine diphosphate, USP, bots..kilo.	450.00	450.00
Histidine hydrochloride-laevo, NF, fib. dms., 50-kilo lots, works..kilo.	80.00	80.00
Homatropine hydrobromide, USP, bots..oz.	13.75	9.35
Hydrochloride, bots.....oz.	20.00	20.00
Methylbromide, USP, bots..oz.	13.00	10.00
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago unit-ton.	6.75	7.00
Hops, NF, bls.....lb.	.30	.30
Horehound herb, bls.....lb.	.14	.16
Hydrastine, bots.....oz.	29.50	29.50
Hydrochloride, NF, bots....oz.	29.50	29.50
Sulphate, bots.....oz.	35.00	35.00
Hydrastinine, 10-grain bots..bot.	1.95	1.95
Hydrazine, free base, ret. dms., Niagara Falls..lb.	4.50	3.00
Hydrate, 100% ret. dms., Niagara Falls..lb.	3.00	1.75
85%, same basis .....lb.	2.55	1.35
Hydrofuramide, dms., fib. ctns., works..lb.	.30	.30
Hydrogen chloride, anhyd., 50-lb. cyls., works..lb.	.55	.45
Peroxide, USP, bbls., divd..lb.	.03¾	.03¾
35%, tanks.....lb.	.203	.201
Hydroquinone, photo, grd., bbls., dms....lb.	.90	.98
tech., dms., frt. equald..lb.	.76	.77
Hydroxycitronnellal, cns.....lb.	5.35	5.10
Hyoscyamine, bots.....oz.	15.75	15.75
Hydrobromide, bots.....oz.	16.50	16.50
Sulphate, bots. .....oz.	12.00	12.00
Hypernic extract, cryst., No. 2, bbls., l.c.l...lb.	.52	.52
liquid, No. 1, bbls., l.c.l...lb.	.35	.35
No. 2, bbls., l.c.l.....lb.	.27	.27

I

Ichthammol, NF, dms.....lb.	.60	.60
Indigo, nat., chests.....lb.	2.14	2.14
synth, paste, 20%, bbls.....lb.	.23	.31
Indol, CP, bots.....lb.	17.00	17.00
Inositol, dms.....lb.	5.60	4.50
Iodine, crude, kgs., USP.....lb.	1.84	1.30
resub., USP, bots, jars.....lb.	2.55	2.55
Iodochlorohydroxyquinolin, USP, dms..lb.	6.90	5.90
Iodoform, NF, dms., kgs....lb.	4.70	4.90
Ionone, alpha, cns.....lb.	3.75	4.00
Beta, cns.....lb.	4.30	4.30
Methyl, dms., cns.....lb.	3.80	4.05
Ipecac, root, bgs .....lb.	5.25	6.25
powd., bbls., bxs.....lb.	6.00	6.25
Irish moss, bleached, prime, bls. lb.	.25	.30
Iron acetate liquor, 28°, bbls., c.l., works	.09	.09
solution, USP IX, cbys..lb.	.16	.16
Cacodylate, NF, bots.....lb.	13.50	13.00
Chloride (ferric) anhyd., tech., dms., c.l., works..100 lbs.	6.25	6.75
cryst., indust., bbls., works, 100 lbs.	5.25	5.25
USP, dms., works .....lb.	.07½	.07½
solution 42°Be, tanks, works 100 lbs.	3.45	3.45
Citrate, gran., dms .....lb.	.77	.88
Glycerophosphate, NF, powd. lb.	4.45	4.75
Hypophosphite, NF, dms..lb.	2.80	2.80
Iodide, bgs.....lb.	3.66	3.66
Naphthenate, liq., 6% Fe, dms., frt. alld..lb.	.23¾	.23¾
Oxalate, gran., dms .....lb.	.85	.85
Phosphate, soluble NF, gran., pearls, cs lb.	.64	.64
Pyrophosphate, soluble NF VII, gran., pearls, dms..lb.	.78	.78
Resinate, 6.75% Fe, dms., frt. alld..lb.	.26¼	.26¼
Stearate, dms., c.l .....lb.	.37	.38
Sulphate, ferric, partially hy- drated, bgs., l.c., works, ton.	30.00	31.75
ferrous, USP, cryst., bbls., dms...lb.	.09½	.09½
Iron-ammonium citrate, brown, NF, gran., dms...lb.	.53	.59
Oxalate, fine gran., dms..lb.	.25½	.25½
Iron-potassium oxalate, fine gran., dms..lb.	.30½	.30½
Iron-sodium oxalate, fine gran., dms..lb.	.25½	.25½
Isoborneol, cns. .....lb.	1.25	1.25
Isobornyl acetate, cns. .....lb.	.65	.65
Formate, dms. .....lb.	.80	.80
Propionate, dms. .....lb.	1.15	1.15
Isobutyl acetate, perfume grade, cns lb.	.72	.75
solvent grade, tanks, divd. E. of Rockies lb.	.11½	.11¼
Methacrylate, dms., works..lb.	.60	.60
Isobutyraldehyde, dms., divd..lb.	.50	.50
Isoeugenol, cns. .....lb.	3.70	3.40
Isoniazid, bulk, powd., 25-kilo lots or more..kilo.	34.00	23.00
Isopentane, dms., works.....lb.	.45	.43
Isophorone, tanks, works.....lb.	.22½	.22½
Isopropyl acetate, tanks.....lb.	.10	.10
Isopropylphenol, tanks, works.lb.	.45	.45
Isoquinolin, dms., works.....lb.	.65	.65

J

Jalap root, NF, bls .....lb.	.45	.38
powd., bbls., bxs.....lb.	.50	.49
Juniper berries, bgs.....lb.	.13	.16

K

Kaolin, NF, powd., fib. dms..lb.	.08	.08
colloidal, fib. dms.....lb.	.15	.15
Kerosene, at refinery, Ark., 42-44 specific gravity, w.w., tanks, gal.	.0925	.09375
California, 40-43 s.g., w.w., tanks gal.	.130	.138
Gulf ports, 41-43 s.g., w.w., tanks..gal.	.1015	.08875
N. Y. Harbor, 43-44 sg., w.w., tanks gal.	.0970	.105
Okla.-Tex., 41-43 s.g., w.w., tanks gal.	.0875	.08875
Penn., 45 s.g., w.w., tanks, gal.	.1125	.1125
Kola nuts, bgs. .....lb.	.08	.12

L

Lady's slipper root, bls. ....lb.	1.70	1.70
Lanolin, cosmetic, dms., works, lb.	.32	.35½
USP anhydrous, dms., works, lb.	.33½	.34
hydrous, dms., works ....lb.	.35½	.33
Lard, cash, trcs., Chicago....lb.	.08¾	.17½
Larkspur seed, bgs .....lb.	.20	.20
Lauryl chloride, dms., works, frt. equald lb.	.72	.75
Methacrylate, normal, dms., less than truckloads lb.	1.00	.65½
Lavender flowers, medium, bls. lb.	.55	.55
ordinary, bls. .....lb.	.16	.16
select, bls.....lb.	.90	.90
Lead acetate, white crystals, bbls..lb.	.32	.32
gran., bbls .....lb.	.23	.23
powd., bbls .....lb.	.23	.23
NF, cryst., gran., powd., dms. lb.	.31	.27½
Arsenate, dealers, acid pow- der, dealers, 3-lb. bgs. or larger, c.l., frt. alld. on 96 lbs. or more..lb.	.27½	.27½
1-lb. bgs., c.l.....lb.	.42¼	.41½
Blue, basic sulphate, bbls., c.l., ship't point, frt. alld..lb.	.14¾	.14¾
Chloride, dms .....lb.	.45	.45
Iodide, NF, V, jars .....lb.	3.82	3.82
Linoleate, fused, 26.15%, dms. lb.	.32½	.32½
Metal, pigs, prime, N. Y...lb.	.1475	.1350
E. St. Louis .....lb.	.1455	.1330
Metallic paste, dms., 20,000- 40,000 lbs., works lb.	.34½	.31¾
Monosilicate, bgs., c.l., works, frt. equald..lb.	.1584	.1450
Naphthenate, liq., 16% Pb., dms., divd..lb.	.17½	.17½
24% Pb., dms., divd..lb.	.23¾	.23¾
solid, 37% Pb., dms., divd lb.	.31	.31¼
Nitrate, bbls., c.l. .....lb.	.22¼	.22¼
Oleate, fused, bbls .....lb.	.29¾	.29¾
Orthosilicate gel, 50%, PbO, dms., works..lb.	.32¾	.32¾
60% Pb., O, dms., works lb.	.31¾	.31¾
Peroxide, powd., tech., bbls. lb.	.45	.47
Phthalate, dibasic, dms., works lb.	.41	.41

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  - Lead-Cobalt-Zinc
  - Odorless Driers
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- Witall (Tall Oil) Driers
  - Lead-Cobalt-Manganese

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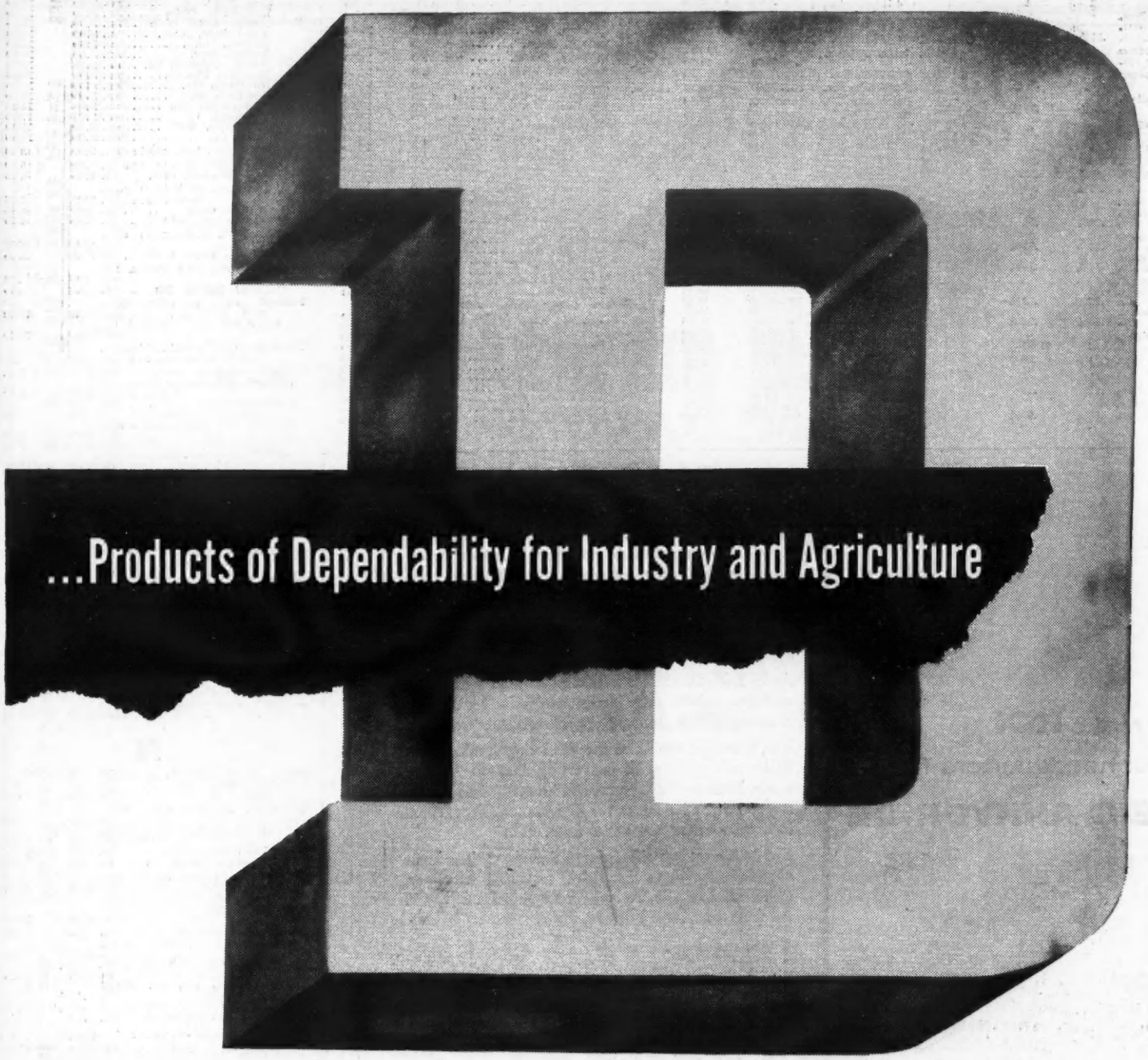

- **PETROLEUM CATALYSTS**—Fluid-type synthetic alumina-silica petroleum cracking catalysts made in ground (DA-1*) or microspheroidal (M-S*) form. Fluid-type magnesia-silica petroleum cracking catalysts made in ground (DA-5*) form. (DRC-12) platinum reforming catalyst.

- **SPECIALTY CATALYSTS** — Custom made catalysts for alkylation, polymerization, oxidation, esterification, hydrogenation, and other reactions. Supports of silica gels, aluminas, pumice, kieselguhr, asbestos, carbon, etc., available. Complete catalysts using a wide range of active agents such as platinum, vanadia, mercury, cobalt, bismuth, chromium, copper, nickel, manganese, etc. Information pertaining to the production of specialty catalysts is kept highly confidential . . . at no time is a customer's restricted material released.

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SAratoga 3900

Lead, Red, 95% Pb_3O_4—Menadione, USP

	1953	1954
Lead, red, 95% Pb_3O_4, or less, bbls., c.l., ship't point, frt. alld.	lb. .17½	.16
97% Pb_3O_4, bbls., c.l., same basis	lb. .17¾	.16¼
98% Pb_3O_4, bbls., c.l., same	lb. .18	.16½
Resinate, precip., dms., dlvd.	lb. .28½	.28½
Salicylate, normal, dms., works,	lb. .46	.46
Stearate, dibasic, ton lots	lb. .54	.54
precip., bbls., c.l.	lb. .39	.39
Tallate, liq., 16% Pb, dms.	lb. .15¼	.15¼
24% Pb, dms.	lb. .20½	.21½
White, basic carbonate, bgs., c.l., ship't point, frt. alld.,	lb. .16¼	.16
basic silicate, bgs., c.l., same basis	lb. .15	.15¼
basic sulphate, bgs., c.l., same basis	lb. .14¾	.14¾
Lecithin, edible, tech., bleached, dms., non-ret., c.l., works.	lb. .15	.15½
unbleached, c.l., same basis.	lb. .14½	.14½
Leucine, dextro-laevo, dms., works	lb. 12.25	12.25
Licorice extract, mass, cns.	lb. .21¼	.28
powd., bbls.	lb. .31¾	.34
Root, bls	lb. .05½	.08
powd., bbls	lb. .13	.10
Lignin extract, tanning grade, bgs., c.l., works	lb. .05¼	.05¼

	1953	1954
Lime, agricultural, bgs., works.	ton. 14.50	14.50
Chemical (quicklime), lump, pebble, bulk, Adams, Mass.	ton. 12.50	12.50
Annville, Pa.	ton. 11.50	11.50
Austin, Texas.	ton. 9.50	9.50
Bellefonte, Pa.	ton. 11.50	11.50
Buffalo, N. Y.	ton. 14.00	14.00
Cedar Hollow, Pa.	ton. 11.50	11.50
Duluth, Minn.	ton. 14.00	11.50
El Paso, Texas	ton. 14.00	14.00
Farnams, Mass.	ton. 14.00	14.00
Gibsonburg, O.	ton. 12.50	12.50
Hannibal, Mo.	ton. 10.00	10.00
Keystone, Ala.	ton. 10.25	10.25
Lee, Mass.	ton. 12.50	12.50
Kimballton, Va.	ton. 10.50	10.50
Lewisburgh, O.	ton. 10.00	10.00
Limedale, Ark.	ton. 10.00	10.00
Los Angeles, Cal.	ton. 25.00	26.84
Marble Cliff, O.	ton. 10.00	11.00
Martinsburg, W. Va.	ton. 11.00	10.75
Mosher, Mo.	ton. 10.25	14.50
Nelson, Ariz.	ton. 14.50	10.00
Quincy, Ill.	ton. 16.00	13.50
Reddick, Fla.	ton. 13.50	10.25
Scotrock, Ala.	ton. 10.25	12.25
Springfield, Mo.	ton. 12.25	12.25
Winooski, Vt.	ton. 15.50	15.50
Woodville, Ohio.	ton. 11.50	11.50
York, Pa.	ton. 15.50	14.50
Hydrated, paper bgs., Adams, Mass.	ton. 15.50	15.50
Annville, Pa.	ton. 14.50	14.50
Austin, Texas	ton. 13.00	14.50
Bellefonte, Pa.	ton. 14.50	16.00

	1953	1954
Lime, hydrated, paper bgs., Buffalo, N. Y.	ton. 16.00	16.00
Buffalo, N. Y.	ton. 16.00	16.00
Cedar Hollow, Pa.	ton. 14.50	14.50
Chicago, Ill.	ton. 15.00	15.00
Duluth, Minn.	ton. 14.00	14.00
El Paso, Texas.	ton. 17.50	17.50
Engle, W. Va.	ton. 14.50	14.50
Farnams, Mass.	ton. 14.00	14.00
Gibsonburg, Ohio.	ton. 16.50	16.50
Hannibal, Mo.	ton. 12.00	12.00
Keystone, Ala.	ton. 13.50	13.50
Kimballton, Va.	ton. 13.50	13.50
Knoxville, Tenn.	ton. 13.00	13.50
Lee, Mass.	ton. 15.50	15.50
Lewisburg, Ohio.	ton. 14.00	14.00
Limedale, Ark.	ton. 12.00	12.00
Marble Cliff, Ohio.	ton. 13.50	13.50
Menominee, Mich.	ton. 14.00	13.50
Mosher, Mo.	ton. 12.50	13.00
McNeil, Tex.	ton. 13.00	13.00
North Tazewell, Va.	ton. 12.75	12.75
Quincy, Ill.	ton. 10.00	10.50
Reddick, Fla.	ton. 16.00	16.00
Scotrock, Ala.	ton. 13.50	13.50
Springdale, Mo.	ton. 12.25	12.25
Winooski, Vt.	ton. 15.50	15.50
Woodville, Ohio.	ton. 14.50	14.50
York, Pa.	ton. 14.50	14.50
Spray, paper bgs., Adams, Mass.	ton. 17.00	17.00
Annville, Pa.	ton. 17.00	17.00
Austin, Texas	ton. 13.00	13.00
Bellefonte, Pa.	ton. 17.50	17.50
Carey, Ohio	ton. 11.00	11.00
Duluth, Minn.	ton. 15.00	15.00
Engle, W. Va.	ton. 14.50	14.50
Farnams, Mass.	ton. 14.00	14.00
Gibsonburg, Ohio	ton. 16.50	14.00
Keystone, Ala.	ton. 13.50	13.50
Kimballton, Va.	ton. 13.50	13.50

	1953	1954
Lime, spray, paper bgs., Lee, Mass.	ton. 17.50	17.00
Lee, Mass.	ton. 17.50	13.50
Lewisburg, Ohio.	ton. 16.00	17.00
Marble Cliff, Ohio.	ton. 16.00	16.00
Menominee, Mich.	ton. 14.00	14.00
Mosher, Mo.	ton. 12.50	13.00
McNeil, Tex.	ton. 16.00	16.00
North Tazewell, Va.	ton. 12.75	12.75
Reddick, Fla.	ton. 16.00	16.00
Rockland, Me.	ton. 10.00	10.00
Scotrock, Ala.	ton. 13.50	13.50
Springfield, Mo.	ton. 12.25	12.25
Winooski, Vt.	ton. 17.00	17.00
Woodville, Ohio.	ton. 16.50	16.50
York, Pa.	ton. 15.50	15.50
Limestone, grd., bgs., works	ton. 3.50	3.50
Linalool, ex bois de rose, dms	lb. 5.60	5.30
ex lignaloe wood, dms.	lb. 6.75	6.75
Linalyl acetate, ex bois de rose, 90-92%, dms.	lb. 5.65	5.35
96-98%, dms.	lb. 6.60	6.55
ex petitgrain, bots.	lb. 4.60	3.90
Lindane, 25%, formulation, dms.	lb. 2.70	2.20
98%, tech., dms., works	lb. 5.75	2.75
Linden flowers with leaves, bls.	lb. .34	.34
without leaves, bls.	lb. .40	.40
Linseed meal expeller, 34%, bulk, Midwest mills	ton. 82.00	67.50
extracted, 36%, same basis.	ton. 82.00	72.50
Litharge, com'l, powd., bbls., c.l., ship't point, frt. alld.	lb. .16	.15½
Lithium benzoate, dms.	lb. 1.67	1.65
Bromide, NF, bbls., works frt. equald.	lb. 2.10	2.10
Carbonate, tech., dms.	lb. .80	.90
Chloride, cryst., dms.	lb. .95	.95
Citrate, NF, bbls., dms., kgs.	lb. 1.05	1.60
Fluoride, bbls.	lb. 1.80	2.20
Hydride, powder, dms., works.	lb. 12.00	12.00
Hydroxide, monohydrate, dms.	lb. .91	1.10
Salicylate, dms.	lb. 1.60	1.60
Lithopone, ordinary, bgs., c.l., dlvd.	lb. .07½	.07½
Titanated (high-strength), bgs., c.l., dlvd.	lb. .10	.10
Lithopone prices, Pacific Coast 1c. per lb. higher.		
Lobelia herb, bls.	lb. .42	.45
Lobeline sulphate, bots., works.	oz. 34.00	29.50
Logwood extract, crystals, No. 1, bbls., l.c.l.	lb. .41	.41
No. 2, bbls., l.c.l.	lb. .39	.39
liquid, No. 1, bbls., l.c.l.	lb. .20	.20
No. 2, bbls., l.c.l.	lb. .19	.19
No. 3, bbls., l.c.l.	lb. .18½	.18½
solid, No. 1	lb. .35	.35
Lycopodium, cs.	lb. 1.70	1.50
Lysine hydrochloride, dexro laevo, bots.	kilo 145.00	145.00

M

Mace, Siauw, No. 1, bis.	lb. .97	1.10
West Indian, bls.	lb. .84	NS
broken, bls.	lb. .70	NS
Magnesia, calcined, tech., ctns., works	lb. .32	.32
synth. rubber grade, ctns., works	lb. .31	.31
USP, light, ctns.	lb. .34	.34
heavy, bbls.	lb. .36	.36
Magnesite, chemical grade, bgs., c.l., works, frt. equald	ton. 72.50	82.50
dead-burnt, bulk, c.l., standard grain, Chewalah, Wash.	ton. 36.30	38.00
Magnesium bromide, jars.	lb. .90	.90
Carbonate, tech., bgs., c.l., frt. equald.	lb. .09½	.09¼
bbls., c.l., frt. equald.	lb. .10¾	.10¾
kgs., c.l., frt. equald.	lb. .12	.12
USP, bgs., c.l., frt. equald	lb. .11¼	.11¼
bbls., c.l., frt. equald.	lb. .11¾	.11¾
kgs., c.l., frt. equald.	lb. .13	.13

Magnesium carbonate is quoted frt. alld. to N. J. except to Atlantic, Burlington, Cape May, Cumberland, Glostershire, Ocean and Salem counties, and to Phila. county, Pa. Frt. equald, with N. Y. C. on all other destinations.

Chloride, anhyd., lump, 95-98%, dms., c.l., works. frt. equal	lb. .12¾	.12¾
powder, bbls., works.	ton. 50.00	50.00
hydrous flake, dms., l.c.l., works.	ton. 49.00	50.00
Gluconate, dms., cns.	lb. 1.30	1.30
Hydroxide, NF medicinal, bbls., dms., kgs.	lb. .26½	.26½
Hypophosphite, dms.	lb. 1.60	1.60
Laurate, bbls.	lb. .46	.46
Metal, 98.8% ingots, cs., works	lb. .24½	.27
sticks, cs., works frt. alld. on carlots.	lb. .42	.45
Oleate, fused, bbls.	lb. .33½	.31
Peroxide, 15%, dms., works.	lb. 1.00	1.00
Phosphate, tribasic, NF, bbls.	lb. .75	.75
Silicofluoride, bbls., works.	lb. .12	.09
Stearate, ctns., 2,000 lbs. to c.l.	lb. .38	.38
Trisilicate, USP, dms., 5,000-lb. lots.	lb. .38	.38
Maleic anhydride, dms., c.l., dlvd. E. of Rockies.	lb. .37	.27
Mandrake root, bls.	lb. .29	.32
Manganese acetate, bbls., dlvd.	lb. .32½	.35
Arsenate, bgs.	lb. .16	.16
Borate, tech., bbls.	lb. .24	.24
Carbonate, bbls., works	lb. .21	.21
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, paper bgs., gross for net, works.	ton. 83.00	88.00
Gluconate, dms., cs.	lb. 1.86	1.79
Glycerophosphate, NF, fib. dms.	lb. 4.70	4.70
Hydrate, bbls., dlvd.	lb. .33¼	.33¼
Hypophosphite, NF, dms.	lb. 2.00	2.00
Linoleate, liquid, 4.35% Mn, dms	lb. .30½	.30½
solid, precip., 8.2% Mn, bbls.	lb. .33½	.33½
Metal, cs., dlvd. East.	lb. .30	.30
Naphthenate, liquid, 6% Mn, dms., frt. alld.	lb. .25	.25
Oleate, precip., bbls.	lb. .33½	.31
Resinate, fused, 3½% Mn, dms.	lb. .21¾	.21¾
precip., dms.	lb. .24½	.24½
Stearate, ctns., c.l.	lb. .38	.38
Sulphate, fertilizer grade, 65%, bgs., c.l., dlvd. S.E.	ton. 75.00	80.50
Tallate, 6%, dms.	lb. .21¾	.21¾
Mangrove bark, E. Africa, 38% tannin, c.l., ex dock	ton. 79.00	77.00
So. American, 30% tannin, c.l., ex dock	ton. 58.50	57.50
Mannitol, com'l dms., works.	lb. .40	.40
reagent 50-lb. dms., works.	lb. .85	.85
Melamine, bgs., ton lots, works.	lb. .33	.33
Menadione, USP, bots.	gram. .09	.09

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PSI

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Menthol, Nat., USP, Brazilian—Nitrocellulose, Spirit-Soluble

		1953	1954
Menthol, nat., USP, Brazilian, cs.	lb.	5.00	5.10
Japanese, cs.	lb.	6.70	9.00
synth., USP racemic, cns.	lb.	4.95	4.95
Menthyl salicylate, tins	lb.	4.00	4.00
Mercaptobenzothiazole, bgs., fib. dms., ton lots, frt. alld.	lb.	.34	.36
Mercaptobenzothiazyldisulphide, bgs., fib. dms., ton lots, works, frt. alld	lb.	.42	.48
Mercury cyanide, NF VIII, powd., fib. dms.	lb.	5.29	5.29
Iodide, red, NF, fib. dms.	lb.	6.22	6.22
yellow, NF, fib. dms.	lb.	6.47	6.47
Oxide, yellow, USP, fib. dms.	lb.	4.64	4.64
Mesityl oxide, tanks, dlvd.	lb.	.11½	.11½
Meta-aminophenol, distilled, dms., ton lots	lb.	2.05	2.05
Metaldehyde, dms., works	lb.	.95	.95
Metachloroanilin, dms., works	lb.	.80	.75
Metacresol, 98%, dms., c.l., works	lb.	.73½	.73½
Metanitroanilin, dms., frt. alld.	lb.	1.05	1.05
Metanitroparatoluidin, bbls.	lb.	1.54	1.50
Metaphenylenediamine, kgs., frt. alld.	lb.	.90	.90
Metatoluidine, tankcars, works, frt. alld.	lb.	.76	.78
Metatolylenediamine, fib. dms., frt. alld.	lb.	.94	.94
Methanol, nat., denaturing grade tanks, frt. alld.	gal.	.70	.70

Prices on natural methanol W. of Miss. 3c. higher.

		1953	1954
Methanol, synthetic, Zone 1, tanks, frt. alld.	gal.	.32	.32
Zone 2, tanks, frt. alld.	gal.	.35½	.35½

Synthetic methanol zones are: Zone 1 is all continental U. S., E. of Eastern boundaries of Ariz., Idaho, Mont., and Utah. Zone 2 is remainder of the U. S., West of above state boundaries, comprising Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.

Methionine, dextro-laevo, fib. dms., frt. alld. 50 lbs. or more	lb.	4.55	4.55
feed grade, 98%, fib. dms., same basis	lb.	3.00	3.00
97%, fib. dms., same basis.	lb.	2.97	2.97
Methoxyclor, 50% wettable powder, dealers, dms., cs., frt. alld.	lb.	.61	.61
Methyl abietate, non-ret. dms., dlvd., zone 1	lb.	.17	.20½
hydrogenated, non-ret. dms., c.l., dlvd., zone 1	lb.	.17¼	.21

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn., St. Louis, Mo., Miss., Ala., Ga., Fla., S. C. and Tenn.

Acetone, natural, tanks, E. of Miss., frt. alld.	gal.	.45	.45

Natural methyl acetone prices W. of Miss., 3½c. per gallon higher.

		1953	1954
Methyl acetone, synthetic, tanks, dlvd. E.	gal.	.54½	.54½

Synthetic methyl acetone, East territory is Mont., N. Mex. and Wyo. West territory in all states west of those three.

Acrylate, tanks, works	lb.	.40	.42¾
Anthranilate, cns.	lb.	2.35	2.35
extra, cns.	lb.	2.65	2.65
Benzoate, cns., dms.	lb.	.53	.53
Bromide, jobbers, cyls., various sizes, works	lb.	.47	.47
Chloride, indust., tanks, multi-unit, works	lb.	.14	.15
single-unit, works	lb.	.11½	.11½
refrigerator mfrs., cyls., dlvd.	lb.	.39	.39
other consumers or servicemen, cyls., dlvd.	lb.	.486	.486
Cinnamate, cns.	lb.	1.43	1.43
Cyclohexanol, tanks, works	lb.	.33	.34
Formate, refd., dms.	lb.	.35	.35
tech., tanks, works	lb.	.07	.07
Lactate, dms., l.c.l., works	lb.	.35	.35
Methacrylate, dms., c.l. and truckloads, frt. equald. with Belle, W. Va., and Arlington, N. J.	lb.	.35	.35
Parahydroxybenzoate, USP, fib. dms.	lb.	1.90	1.90
Roseanilin chloride, NF, fib. dms.	lb.	5.40	5.44
Salicylate, USP, dms., 500 lbs.	lb.	.50	.53
Testosterone, USP, 100 grams.	gram.	1.75	.79
Methylamyl acetate, tanks, dlvd. E.	lb.	.13	.13
Ketone, dms., works	lb.	1.05	1.05

		1953	1954
Methylcellulose, special vis. (1,500-4,000 cps.) 50-lb. bgs., c.l., works	lb.	.76	.76
standard, vis. (15-400 cps.) 50-lb. bgs., c.l., frt. alld.	lb.	.66	.66
Methylene blue, 100-lb. lots, kgs., frt. adjusted	lb.	3.25	3.25
Chloride, indust., dms., c.l., dlvd. E.	lb.	.11½	.13½
Methylethyl ketone, tanks, dlvd.	lb.	.11	.11
Methylethylpyridin, tanks, works.	lb.	.46	.46
Methylheptin carbonate, bots.	lb.	35.00	30.00
Methylionone A, cns.	lb.	6.55	6.55
D, cns.	lb.	7.50	7.50
prime, cns.	lb.	4.55	4.55
Methylisobutyl ketone, tanks, dlvd.	lb.	.13	.13
Methylnaphthyl ketone, cns.	lb.	3.00	3.60
Methylphenylpyrazolone, 250-lb. dms., dlvd.	lb.	1.60	1.70
Mica, dry-grd., paint, plastic, 100 mesh, bgs., c.l., works.	lb.	.04½	.04¼
roofing, 20 to 80 mesh, bgs., c.l., works	lb.	.03½	.04
wet-grd., biotite, bgs., c.l., works, frt. alld. E.	lb.	.05¾	.06¼
paint or lacq., bgs., c.l., works, frt. alld. E.	lb.	.07¼	.07¾
rubber, bgs., c.l., works, frt. alld. E.	lb.	.07	.07½
wallpaper, bgs., c.l., works, frt. alld. E.	lb.	.07¼	.07¾
white extra fine, bgs., c.l., works, frt. alld. E.	lb.	.07¼	.07¾

Mica, wet-grd., W. of Miss. R., ½c. higher; W. of Rockies, 1c. higher.

Milk powder, skimmed, roller, bbls., c.l.	lb.	.15½	.14
spray, bbls., c.l.	lb.	.16¾	.16¼
whole, roller, bbls., c.l.	lb.	.33	NP
spray, bbls., c.l.	lb.	.35½	.32½
Sugar, crude, bgs., c.l., works.	lb.	.18	.18
edible, bgs., works, 30,000-lb. lots	lb.	.24	.24
USP, fib. dms., works, 30,000-lb. lots, works	lb.	.29	.29
Molasses, blackstrap, feed grade, tanks, N. Y.	gal.	.10½	.12½
Molybdenum metal, 90% Mo., powd., kgs.	lb.	3.00	3.00N
Trioxide, pure, kgs., works, basis, Mo. content	lb.	1.35	1.40
technical, kgs., works, basis, Mo. content	lb.	1.13	1.15
Monobutylamine, tanks, E. of Rockies	lb.	.53	.53
Monochlorobenzene, tanks, frt. alld. or dlvd. E	lb.	.09	.10
Monoethanolamine, tanks, dlvd. E.	lb.	.28	.28
Monoethylalphanaphythylamine, dms., works	lb.	.88	1.02
Monoethylamine, 70% contained amine, dlvd.	lb.	.30¼	.31
Monoethylanilin, tanks, frt. alld.	lb.	.50	.50
Monoethylorthotoluidin, bbls.	lb.	.80	.88
Monoisoprophylamine, tanks, frt. alld. E. of Rockies	lb.	.28½	.28½
Monomethylamine, 25%-40%, tanks, works, basis 100%	lb.	.31	.31
Monotertiarybutylmetacresol, tanks, works	lb.	.48	.48
Morphine, cns.	oz.	12.40	12.40
Acetate, anhyd., cns.	oz.	9.95	9.95
Hydrobromide, cns.	oz.	9.90	9.90
Hydrochloride, NF, cns.	oz.	9.90	9.90
Sulphate, USP, cns.	oz.	9.90	9.90
Morpholine, tanks, dlvd. E.	lb.	.59	.52¾
Musk, nat., Tonquin, grains, bots.	oz.	40.00	NS
synthetic, ambrette, 100 lbs. or more, fib. dms.	lb.	5.35	5.15
ketone, 100 lbs. or more, fib. dms.	lb.	5.30	5.30
xylol, 100 lbs. or more, fib. dms.	lb.	1.50	1.40
Mustard seed, Danish, yellow, bgs.	lb.	.10¾	.11
Dutch, yellow, bgs.	lb.	.11	.10½
English, yellow, bgs.	lb.	.12	.11
Montana, oriental, bgs., source	lb.	.05½	.12
yellow, bgs., source	lb.	.09½	.08¼
Myrobalans, J1, ord. bgs., ex dock	ton.	48.50	44.00
assorted, ex dock	ton.	48.50	48.00N
crushed, bgs., ex dock	ton.	65.00	61.50
Extract, Indian, solid, 53% tannin, ex dock plus duty	lb.	.07	.07¼

N

Naphthalene, dom., crude, 74°, tanks, frt. equald	lb.	.0625	.045
78°, tanks, frt. equald	lb.	.0675	.05
refined, industrial, tanks, same basis	lb.	.10¾	.09¼
balls, flakes, wholesalers, jobbers, bbls., c.l., same basis	lb.	.14½	.13¾
imported, crude, 78°, large lots.	lb.	.0385	.0325
Neocinchopen, USP, dms., frt. adjusted	lb.	7.00	7.00
Neomycin, fib. dms., 100-kilo lots, basis activity	gram.	.60	.60
Nepheline syenite, glass, 24 mesh, bulk, works	ton.	14.25	14.25
works, N. Y.	ton.	18.25	18.25

Nepheline syenite in bgs., $3 per ton higher than bulk.

Nerolin, cns.	lb.	2.25	2.15
Nickel acetate, bbls., dlvd.	lb.	.60	.75
Carbonate, bbls., dlvd.	lb.	.66¼	.71
Chloride, bbls., dlvd.	lb.	.34½	.37
Formate, bbls., ton lots, frt. alld.	lb.	.56½	.64
Metal, electro cathodes, cs., works	lb.	.56½	.60
Nitrate, bbls., works	lb.	.33½	.33½
Oxide, black, bbls.	lb.	.63¼	.69
Sulphate, bgs., c.l., dlvd.	lb.	.26½	.29
Nicotinamide, USP, dms., frt. adjusted	kilo.	12.00	12.00
Hydrochloride, dms., frt. adjusted	kilo.	11.50	11.50
Nicotine sulphate, 40%, 50-lb. dms.	lb.	—	1.20
Niger seed, bgs., afloat	lb.	.11½	.11¼
Nikethamide, cbys.	lb.	7.50	7.50
Nitrobenzene, dbl., dist., tanks, frt. alld.	lb.	.09½	.11
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l., works	lb.	.33	.34
18-25 cps., bbls., c.l.	lb.	.35	.36
250-400, 600-1,000 secs., bbls., c.l., same basis.	lb.	.42	.39
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis	lb.	.45	.41
5-6, 40-60 secs., bbls., c.l., same basis	lb.	.44	.40

Denatured alcohol used in the manufacture of nitrocellulose if charged extra. Drums extra, but returnable.

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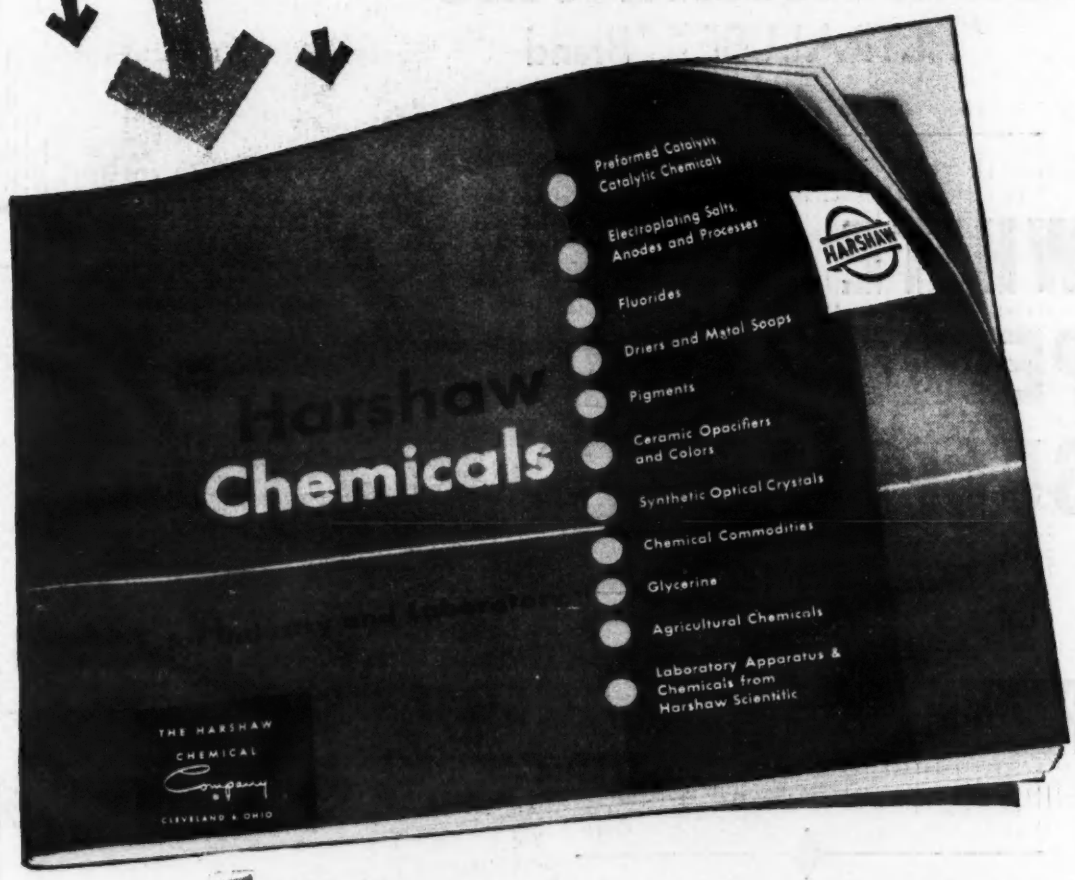

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		1953	1954
Nitroethane, dms., works	lb.	.25	.25
Nitrogen solution, tanks, works, 37-40%, 8% N.	ton.	123.00	128.00
Nitrogenous process tankage, bulk, works	unit-ton.	5.00	3.50
Sewage sludge, bulk, works	unit-ton.	3.75@3.50	3.75@3.50
Nitromethane, dms., dlvd. E. of Rockies	lb.	.25	.25
Nitropropane, 1, dms., dlvd. E. of Rockies	lb.	.23¼	.23¼
2, dms., dlvd. E. of Rockies.	lb.	.25	.25
Nonylphenol, tanks, works	lb.	.32½	.29
Nutgalls, Aleppo, bgs.	lb.	.38	.38
Chinese, bgs.	lb.	.32	.45N
Nutmegs, East Indian, whole, bgs	lb.	.34½	.38
shrivel, bgs.	lb.	.32½	.38
West Indian, bgs.	lb.	.28¼	.29
Nux vomica, bls.	lb.	.10	.10
powdered, bbls., bxs.	lb.	.13	.15

O

Octane, industrial, tanks, Bayonne, N. J	gal.	.18	.19
Octanol, normal, tech., tank, dlvd	lb.	.394	.394
Octyl methacrylate, normal, dms., less than truckload, works	lb.	—	.83
Octylphenol, tanks, works	lb.	.25¾	.22¾
Oil, abies siberica, cns	lb.	2.50	2.05
Almond, natural, bitter, F.P.A., bots.	lb.	2.75	3.00
NF, bots	lb.	2.85	3.00
sweet, USP, dms., cns	lb.	.55	.49
Amyris, dms		1.60	1.40
Angelica root, bots	lb.	115.00	70.00
seed, bots	lb.	50.00	56.00
Anise, USP, Chinese, dms.	lb.	2.25	2.75
Apricot, kernel, USP, dms	lb.	.34	.45
Avocado, cns	lb.	NP	3.25
Bay, NF, Puerto Rican, 50-55%, cns	lb.	1.55	1.45
55-60%, cns.	lb.	1.65	1.65
West Indian, 50-55%, cns., dms	lb.	1.45	1.45
Bergamot, artif., cns	lb.	2.90	2.90
natural, NF, Italian, cns	lb.	11.75	10.75
Birchtar, crude, cns	lb.	1.75	1.75
rectified, NF, cns	lb.	2.55	2.50
Bois de rose, Brazil, cns	lb.	3.25	4.00
Bone, dms., works	gal.	.65	.65
Cajeput, redis., USP, cns	lb.	2.30	2.45
tech, cns	lb.	1.95	1.90
Calamus, cns.	lb.	10.00	12.00
Campnor, nat., sassafrassy, dms.	lb.	.26	.26
white, dms	lb.	.26	.26
Cananga, native, cns	lb.	10.50	8.85
rectified, cns	lb.	11.00	12.50
Caraway, NF, cns	lb.	3.00	2.35
Cardamom, NF, bots	lb.	43.00	29.00
Castor, blown, dms., c.l	lb.	.29	.21
dehydrated, bodied, tanks.	lb.	.3110	.2210
unbodied, tanks	lb.	.2960	.2110
hydrogenated, bgs	lb.	.3425	.2650
No. 1, Brazilian, tanks	lb.	.2525	.1550
USP, tanks	lb.	.26	.18
refined and deodorized, tanks	lb.	.2750	.2050
No. 3, tech., tanks	lb.	.2750	.1775
sulphonated, 50% (48% fat), dms	lb.	.16½	.13½
75% (60-62% fat), dms., l.c.l	lb.	.23	.17
Cedarleaf, cns., dms.	lb	2.25	2.00
Cedarwood, cns., dms.	lb.	.48	.47
Celeryseed, bots.	lb.	16.50	15.50
Chamomile, blue, Hungarian, bots	lb.	225.00	175.00
Chaulmoogra, NF, cns., dms.	lb.	.55	.55
Cinnamon bark, USP, bots.	lb.	23.00	18.50
leaf, Ceylon, bots.	lb.	2.00	1.25
USP, cns., dms. (Cassia)	lb.	5.25	NS
Citronella, Ceylon, cns., dms.	lb.	.53	.60
Java, true, cns.	lb.	1.10	.70
Java-type, cns.	lb.	.45	.60
Clove, USP, dms., cns.	lb.	9.50	5.25
Coconut, crude, tanks, N. Y.	lb.	.17	.17
Pac. Coast	lb.	.16	.16
refined, Cochin type, tax incl., dms., l.c.l	lb.	.23½	.25
deodorized, tax incl., nonre. dms., l.c.l.	lb.	.24¾	.27¾
Cod, Newfoundland, dms.	lb.	.10	.09½
Codliver, USP, dms.	gal.	1.85	1.85
Copaiba, cns.	lb.	2.00	1.80
Coriander, USP, bots.	lb.	20.50	16.90
Corn, crude, tanks, works	lb.	.14¼	.13⅝
foots (soapstock) acid, 95%, tanks, N. Y.	lb.	.04½	.04½
refined, tanks	lb.	.17¾	.16⅝
Costus, bots.	oz.	12.50	9.00
Cottonseed, crude, tanks, Southeast	lb.	.14⅜	.12½
foots (soapstock) acid, 95%, tanks, N. Y	lb.	.02½	.02¾
raw, 50%, tanks, same basis	lb.	.01¼	.01¼
salad, tanks	lb.	.18	.17⅝
Croton, cns.	lb.	4.75	4.75
Cubeb, cns.	lb.	4.50	4.50
Cumin, bots.	lb.	4.25	4.15
Cypress, bots.	lb.	6.00	5.30
Dillseed, India, bots.	lb.	2.80	2.80
Dillweed, domestic, bots.	lb.	4.20	3.60
Erigeron, cns.	lb.	6.50	5.50
Eucalyptus, NF, rectified, 80-90%, dms.	lb.	.90	.82
70-80%, dms.	lb.	.85	.60
Fennel, sweet, USP, cns.	lb.	2.30	2.60
Fir, Canada, cns.	lb.	2.65	2.65
Fish, ref. alkali, dms.	lb.	.1410	.1450
kettle bodied, dms.	lb	.1610	.1630
light pressed, tanks	lb.	.11	.11½
Fishliver, concentrating or feed, 4,000 to 12,000 A units per gm., dms. 1,000,000 units.		.12	.08
10,000 to 20,000 A units. per gm., dms. 1,000,000 units.		.12	.09
25,000 to 35,000 A units. per gm., dms. 1,000,000 units.		.12	.09
40,000 to 55,000 A units. per gm., dms. 1,000,000 units.		.12	.10½
prime natural or concentrate, 100,000 A units per gm., dms 1,000,000 units.		.13	.12
200,000 A units per gm., dms 1,000,000 units.		.13	.12
300,000 A units per gm., dms 1,000,000 units.		.13	.12
400,000 A units per gm., dms 1,000,000 units.		.13	.12
500,000 A units per gm., dm 1,000,000 units.		.13	.12
Garlic, pure, bots.	oz.	7.25	8.50
Geranium, Algerian, cns	lb.	12.25	8.35
Bourbon, cns	lb.	12.00	10.75
Ginger, dist., bots.	lb.	14.00	10.00
Grapefruit, dms.	lb.	2.65	3.15
Grease, No. 1, dms	lb.	.11	.11¼
extra, winter, strained, dms.	lb.	.12½	.15½
prime, burning, dms.	lb.	.13½	.16¼
Guaiacwood, cns.	lb.	1.65	1.40
Hemlock, cns.	lb.	2.10	2.10
Juniper berry, NF, VIII, bots.	lb.	2.50	2.70
twice rectified, bots.	lb.	3.60	3.60
Laurel, dms., cns	lb.	9.75	9.50
Lavandin, dms., cns.	lb.	2.50	2.00
Lavender, flower, USP, French, 30-32% ester, cns.	lb.	3.10	2.50
38-40% ester, cns.	lb.	5.25	5.60
40-42% ester, cns.	lb.	6.00	5.75
spike, Spanish, cns	lb.	1.30	1.50
Lemon, USP, Calif., cns.	lb.	5.65	7.10
Messina, cns.	lb.	5.75	7.00
Lemongrass, cns., dms.	lb.	1.00	1.15
Lignaloe wood, Mexican, cns.	lb.	3.15	3.50
Lime, distilled, Mexican, cns.	lb.	6.00	5.25
West Indian, cns	lb.	7.00	5.90
expressed, West Indian, cns.	lb.	7.85	7.75
terpeneless, bots	lb.	45.00	29.50
Linseed, raw tankcars, N. Y.	lb.	.1595	.1625
Mace, dist., cns., dms	lb.	2.95	2.45
Mandarin, Floridian, dms.	lb.	5.00	3.00
Italian, cns	lb.	6.00	6.25
Menhaden, crude, tanks, Balto.,	lb.	.07½	.07½
Mustard, seed, natural, dms.,	lb.	.16	.15¾
synthetic, cns., dms	lb.	1.60	1.55
Neatsfoot, 15°, dms	lb.	.31	.33
20°, dms	lb.	.30	.32
30°, dms	lb.	.28	.30
Neroli, NF, French, bots.	lb.	216.00	165.00
petale, bots.	lb.	50.00	38.50
Nutmeg, USP, dist., East Indian, cns., dms	lb.	3.35	2.85
West Indian, cns., dms	lb.	2.95	2.60
Ocotea cymbarum, dms	lb.	.58	.70
Oiticica, liquid, tankcars	lb.	.26	.16¾
Oleo, extra, dms.	lb.	.11½	.18¾
Olibanum, bots.	lb.	5.50	5.50
extra fine bots.	lb.	8.00	8.00
Olive, edible, dms., duty paid.	gal.	2.35	2.30
Oil, orange, sweet, dist., cns	lb.	.70	.40
expressed, USP, Brazilian, cns., dms	lb.	NS	NS
Calif., cns	lb.	.95	.70
Florida, cns.	lb.	.90	.66
Messina, cns.	lb.	4.00	3.85
West Indian, cns	lb.	2.75	2.75
sesquiterpeneless, bots	lb.	150.00	135.00
Origanum, Spanish, cns.	lb.	2.15	1.95
Palm, clarif., tankcars	lb.	.1260	.12¾
Palmarosa, cns	lb.	7.50	5.00
Palm kernel, in bond, tanks.	lb.	.14½	.15N
Paraffin, pale, 100-110 vis. at 100° F., tanks, East Coast refinery	gal.	.14	.14
Patchouli, dms	lb.	6.95	7.20
Peanut, crude, tanks, South-east	lb.	.25½	.17
refined, tanks	lb.	.29¼	.20½
Pennyroyal, USP, imported, cns.	lb.	2.00	1.60
Peppermint, natural, dms	lb.	5.50	5.60
redist., USP, dms	lb.	5.75	5.85
Petitgrain, Paraguay, cns., dms	lb.	2.35	2.45
Pimento berry, NF, dms	lb.	4.40	4.20
leaf, cns	lb.	2.35	2.35
Pine, dest.-dist., dms., extra, c.l., works	gal.	.75½	.75½
steam-dist., dms., ex-whse., East	lb.	1.27	1.27
Putty, petroleum, tanks, dlvd.	lb.	.11	.11
Rapeseed, tankcars	lb.	.16½	.16¼
Rice bran, clarif., dms	lb.	.16	.16½
Red (see oleic acid).			
Rose, natural, coppers	oz.	50.00	55.00
Rosemary, Spanish, tech., cns., dms	lb.	.60	.60
USP, cns., dms	lb.	.50	.75
Rue, bots	lb.	1.95	2.25
Safflower, tanks, Atlantic Coast	lb.	.17	.15¾
Sage, clary, bots	lb.	20.00	20.00
Dalmatian, cns	lb.	7.50	7.50
Spanish, cns	lb.	.90	.90
Sandalwood, NF, cns	lb.	9.75	9.50
Sardine, crude, tanks, Pac. coast	lb.	NP	NS
Sassafras, artificial, dms	lb.	.50	.50
natural, domestic, USP, cns., dms	lb.	1.90	1.70
Savin, cns	lb.	2.75	2.75
Shingle stain, tar distillate, tanks, works	gal.	.21	.23
Snakeroot, Canada, cns	lb.	31.00	29.50
Soybean, crude, tanks, mills.	lb.	.13¾	.12¼
foots (soapstock) acid, 95%, tanks, N.Y	lb.	.04¾	.03½
raw, 50%, tanks, N.Y.	lb.	.02	.02½
refined, alkali, tanks	lb.	.15875	.14⅝
clarified, tanks	lb.	.15375	.14¼
salad, tanks	lb.	.16	.15¼
Spearmint, USP, dms	lb.	7.75	6.00
Sperm, bleached winter, 45°, tankcars	lb.	.1520	.12
natural winter, 45°, tankcars,	lb.	.11	.11
Spruce, cns., dms.	lb.	2.10	2.10
Sweet birch, USP, Northern, cns	lb.	4.95	4.25
Southern, cns.	lb.	2.00	2.00
Tall, crude, tanks, works	lb.	.02¼	.02¼
refined, tanks, works	lb.	.05	.05
Tallow, acidless, dms	lb.	.09¾	.13⅛

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Oil, Tansy—Petroleum, Fuel Oil, Bunker C

		1953	1954
Oil, tansy, dms	lb.	8.25	8.25
Tar, pine, com'l, tanks, works	gal.	.41	.42½
rectified, NF, l.c.l., dms., extra, works, South	gal.	.67	.67
Thyme, NF, red, cns., dms	lb.	1.90	1.70
white, cans	lb.	1.95	1.95
Tung, dom., tanks, mills	lb.	.30½	.25½
imported, tanks	lb.	.34¾	.23½
Turpentine, rectified, NF, cns., dms	lb.	.20	.30
Vetiver, Bourbon, cns.	lb.	20.00	15.85
Haitian, cns.	lb.	17.50	12.25
Java, cns.	lb.	29.00	22.50
Wheat germ, 5-gal. dms	gal.	10.00	10.00
White mineral, tech., 50-65 vis., dms., c.l.	gal.	.51½	.51½
65-75 vis., dms., c.l.	gal.	.52½	.52½
NF, 80-90 vis., dms., c.l.	gal.	.53½	.53½
125-135 vis., dms., c.l.	gal.	.59½	.59½
145-155 vis., dms., c.l.	gal.	.66	.66
175-185 vis., dms., c.l.	gal.	.69½	.69½
USP, 200-210 vis., dms., c.l.	gal.	.72½	.72½
345-355 vis., dms., c.l.	gal.	.77	.77
Wintergreen, USP, nat., Northern, cns.	lb.	7.15	7.15
Southern, cns.	lb.	3.86	3.20
Wormseed, USP, cns.	lb.	8.00	4.60
Wormwood, cns.	lb.	5.55	5.50
Ylang-ylang, Bourbon, bots.	lb.	18.00	20.00
extra, bots.	lb.	25.00	25.00
Oleostearin, bbls.	lb.	.08⅝	.11¾N

		1953	1954
Olivine, aggregate, c.l., mines	ton.	7.00	7.00
crushed, 8 mesh, bulk, c.l., works	ton.	10.00	10.00
paper, bgs., c.l., works	ton.	12.00	12.00
Opium, USP, cns.	lb.	19.20	19.20
gran., USP, cns.	lb.	21.65	21.65
powd., USP, cns.	lb.	21.65	21.65
Orange, cadmium lithopone, bbls., frt. alld., E. of Rockies	lb.	1.20	1.59
Orange, chrome, CP, bbls., dlvd. N. of Tenn., and N.C.; E. of Miss. River, includ. Davenport, Tenn., and N. C.; E. of Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.31	.31

Chrome orange prices are ½c. higher, dlvd. Ala., Ga., La. (Shreveport); 1¼c. Miss., N. C.; 1½c. El Paso and Fort Worth, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

		1953	1954
Dinitroanilin toner	lb.	1.30	1.30
Mineral, American, bbls., l.c.l., ship't point, frt. alld.	lb.	.2085	.1910
Molybdated, bbls.	lb.	.44	.44
Orthonitroanilin toner, kgs.,	lb.	1.15	1.15
Persian, bbls.	lb.	.65	.65
Peel, bitter, Haitian, bls.	lb.	.12	.12
sweet bls.	lb.	.14	.16
Orris root, Florentine, bls.	lb.	.20	.35
powdered, bls., bxs.	lb.	.25	.40
Verona, bls.	lb.	.14	.23
powdered, bbls., bxs.	lb.	.19	.28

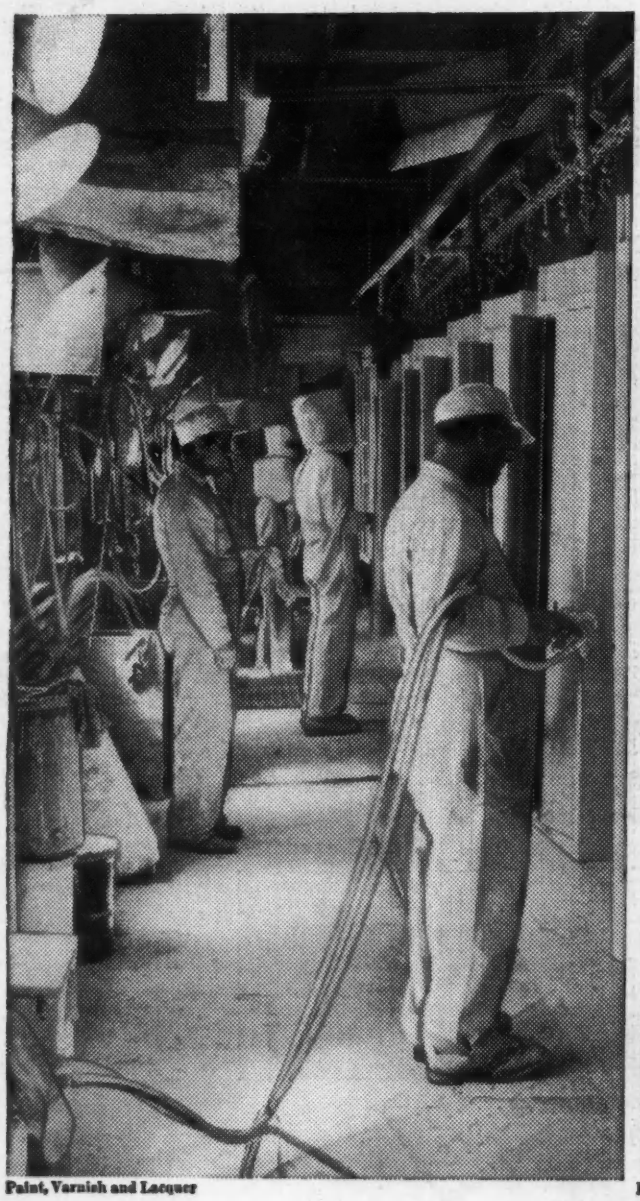
		1953	1954
Orthoaminobiphenyl, tanks, works	lb.	.37	.37
Orthoanisidin, bbls	lb.	.88	.88
Orthochloranilin, dms., c.l.	lb.	.65	.70
Orthochlorobenzaldehyde, dms., works	lb.	1.18	1.20
Orthochloroparanitroanilin, dms., works	lb.	.86	.86
Orthochlorophenol, dms., c.l., frt. equald	lb.	.34½	.34½
Orthocresol, pure, 30°C., non-ret. dms., c.l., frt. equald.	lb.	.198	.173
29° C., non. ret. dms., c.l., same basis	lb.	.19	.16
25-29° C., non-ret. dms., tanks, same basis	lb.	.14	.153
Orthodichlorobenzene, tanks, works, frt. alld. E. of Rockies	lb.	.09¾	.10¾
Orthonitroanilin, dms	lb.	.50	.54
Orthonitrochlorobenzene, dms	lb.	.20	.20
Orthonitrobiphenyl, tech., tanks, works	lb.	.13	.13
Orthonitroparachlorophenol, cns.	lb.	.75	.75
Orthonitrophenol, dms., works	lb.	.94	.94
Orthonitrotoluene, tanks, frt. alld.	lb.	.09	.09
Orthophenetidin, dms., works	lb.	1.00	1.00
Orthophenylphenol, fib. dms., works	lb.	.20	.20
Ortho-tertiary-aminophenol, tanks, works	lb.	.41¾	.41¾
Orthotoluidin, tanks, works	lb.	.22	.22
Osage orange, cryst., No. 1, bbls.	lb.	.40	.40
extract, liq., No. 1, bbls	lb.	.19	.19
Ouabaine, USP, bots	gm.	3.00	3.00
Ox bile, extract, powdered, USP 5-lb. lots or more	lb.	6.00	6.00
not extract, powdered, 5-lb. lots or more	lb.	4.35	4.35
Oxyquinolin sulphate, cns., 100 lbs., works	lb.	4.75	4.75

P

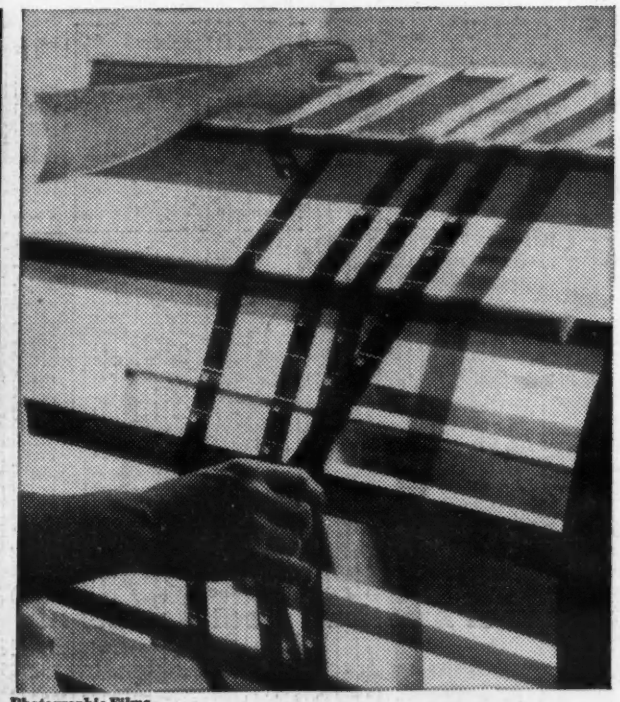
		1953	1954
Pancreas substance, assay 1:75, bots., 5-lb. lots or more	lb.	5.75	5.75
Pancreatin, USP, bots	lb.	2.50	2.50
Papain, powd., African, dms	lb.	7.00	5.00
Ceylon, dms	lb.	5.75	4.00
Papaverine, nat. or synth., hydrochloride, USP, cns., 25 to 100 oz. lots	oz.	5.00	5.00
Sulphate, cns	oz.	7.10	7.10
Paprika Spanish bgs	lb.	.43	.42
Para-acetylaminobenzaldehyde-thiosemicarbazone, dms., frt. adjusted	lb.	17.50	17.50
Para-aminophenol, dms., frt. alld	lb.	.97	.97
Para-anisidin, dms., works	lb.	.88	.97
Parachloroanilin, dms., frt. alld., E. Miss	lb.	.75	.75
Parachlorobenzaldehyde, dms., works	lb.	1.34	1.33
Parachloro-orthonitroanilin, dms., frt. alld	lb.	.73	.73
Parachlorophenol, dms., c.l., frt. alld	lb.	.34½	.34½
Paracresol, 98%, dms., c.l., dlvd.	lb.	.49	.49
Methylether, cns.	lb.	2.15	2.15
Paracymene, dms., 50 gals. or more, works	gal.	2.50	2.50
Paradibromobenzene, bgs., 500-lb. lots	lb.	.55	.55
Paradichlorobenzene, dms., c.l., works	lb.	.14½	.14½
Paraffin, crude, scale, white, 121-123° F. ASTM, solid, c.l., ref'y	lb.	.055	.0660
fully ref'd., slabs, 122-124° F. ASTM, loose, c.l., ref'y	lb.	.0745	.0845
125-127° F. ASTM, loose, c.l., ref'y	lb.	.0745	.0845
130-132° F. ASTM, loose, c.l., ref'y	ib.	.0755	.0855
132-134° F. ASTM, loose, c.l., ref'y	lb.	.0755	.0855
135-137° F. ASTM, loose, c.l., ref'y	lb.	.0755	.0855

Paraffin prices in bgs. and ctns., 7/10c. per lb. higher; 1,000 to 9,999 lbs., 2.7c. per lb. higher, and under 1,000 lbs., 3.7c. per lb. higher.

		1953	1954
Paraformaldehyde, tech., 91%, flake, bgs., c.l., frt. alld.	lb.	.12	.12
powd., bgs., c.l., frt. alld.	lb.	.15½	.15½
USP X, fib. dms	lb.	.198	.198
Paraldehyde, tech., 98%, tanks, works	lb.	.12	.12
Paranitroanilin, dms., c.l., frt. alld. works	lb.	.48½	.50½
Paranitrochlorobenzene, kgs., works	lb.	.21	.26
Paranitrophenol, kgs., works, frt. equald	lb.	.46	.50
Paranitrotoluene, kgs., frt. alld.	lb.	.36	.33
Paraphenetidin, dms., works	lb.	.90	1.00
Paraphenylenediamine, redistilled, dms., works	lb.	2.00	2.00
tech., ref'd., dms., same basis	lb.	1.10	1.10
Paraphenylphenol, bgs., works.	lb.	.37½	.37½
Parathion, spray powder, 15%, dealers, tins	lb.	.53	.45
tech., dms., works	lb.	1.50	1.62
Paratertiaryamylphenol, tanks, works	lb.	.25	.25½
Paratertiarybutylphenol, bgs., c.l., works	lb.	.27½	.27½
Paratoluenesulphonamide, flake, frt. alld.	lb.	.70	.64
powd., bbls., works	lb.	.70	.70
solid, bbls., frt. alld	lb.	.61	.61
Paratoluidin, flake, bbls., frt. alld.	lb.	.64	.64
solid, bbls., frt. alld	lb.	.61	.60
Paris green, dealer, distributor, dms., kgs., c.l., works, frt. alld. on 96 lbs. or over	lb.	.35	.36
Passion flower herb, bls	lb.	.25	.20
Peanut meal, 45%, O.F., mills,	ton.	90.00	73.00
Pectin, citrous, NF, powd., bbls.	lb.	2.05	2.05
tech. powd., bbls	lb.	1.50	1.50
Penicillin, crystalline, potassium, sterile, bulk, 1,000,000 units.		.09	.08½
Procaine, bulk, 1,000,000 units.		.10	.08½
Sodium, sterile, bulk, 1,000,000 units.		.09	.08½
Pentachlorophenol, dms., c.l., works, frt. alld.	lb.	.21	.21
Pentaerythritol, tech., bgs., c.l., works	lb.	.33	.34
Pentane, industrial, tanks, group 3	gal.	.12	.12
Pepper, black, Malabar spot, bgs.	lb.	1.27	1.03
Red, Gondar, bgs.	lb.	.25	.28
Japanese, hantakas, bgs., afloat	lb.	.50	.40
birdseyes, bgs., afloat	lb.	.62	.56
Mombassa, bgs., afloat	lb.	.44	.55N
Nigerian, bgs	lb.	.36	.32
Turkish, bgs., shipm't	lb.	.35	.28
Zanzibar, bgs., afloat	lb.	.43	.55N
White, bgs	lb.	1.48	1.05
Peppermint leaves, USP, bls., dms.	lb.	.65	.70
imported, bls.	lb.	1.05N	1.25N
Pepsin, NF, 1: 3,000 bulk	lb.	3.75	3.75
Perchloroethylene, dms., c.l., frt. alld.	lb.	—	.11¾
works	lb.	.11	—
Peru balsam, dms.	lb.	1.35	1.25
Petrolatum, amber, tanks, ref'y.	lb.	.04¾	.03¼
cream, tanks, ref'y	lb.	.06	.04⅝
extra, amber, tanks, ref'y	lb.	.05	.03½
USP, white, lily, tanks, ref'y.	lb.	.05⅛	.04⅞
snow, tanks, ref'y	lb.	.06⅞	.05⅝
soft, tanks, ref'y	lb.	.06⅝	.05
yellow, soft, tanks, ref'y	lb.	.05	.03½
Petroleum, crude, bulk, at wells, California	bbl.	1.10	1.42
Illinois	bbl.	2.44	2.69
Kentucky	bbl.	2.42	2.62
Louisiana-Arkansas	bbl.	2.08	2.33
Montana	bbl.	1.28	1.53
Oklahoma-Kansas	bbl.	2.16	2.48
Penna. grade, Buckeye, O	bbl.	—	3.54
Middle Penna. dist.,	bbl.	4.25	4.05
Texas, East	bbl.	2.65	2.90
Gulf coast	bbl.	2.38	2.63
North, North-Central,	bbl.	2.23	2.48
Panhandle	bbl.	2.23	2.48
West	bbl.	2.33	2.35
Wyoming	bbl.	1.28	1.53
Fuel oil, bunker C, No. 6, East Coast, Baltimore, Md.	bbl.	2.10	2.25
Boston, Mass.	bbl.	2.15	2.29
Charleston, S.C.	bbl.	2.00	2.20
Jacksonville, Fla.	bbl.	1.97	2.18
New York Harbor	bbl.	2.10	2.25
Norfolk, Va.	bbl.	2.05	2.23
Phila., Pa.	bbl.	2.10	2.25
Portland, Me.	bbl.	2.15	2.29
Prov'd'nce, R.I.	bbl.	2.12	2.26
Savannah, Ga.	bbl.	2.00	2.20
West Coast	bbl.	—	1.80



Paint, Varnish and Lacquer



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Decyl Alcohol
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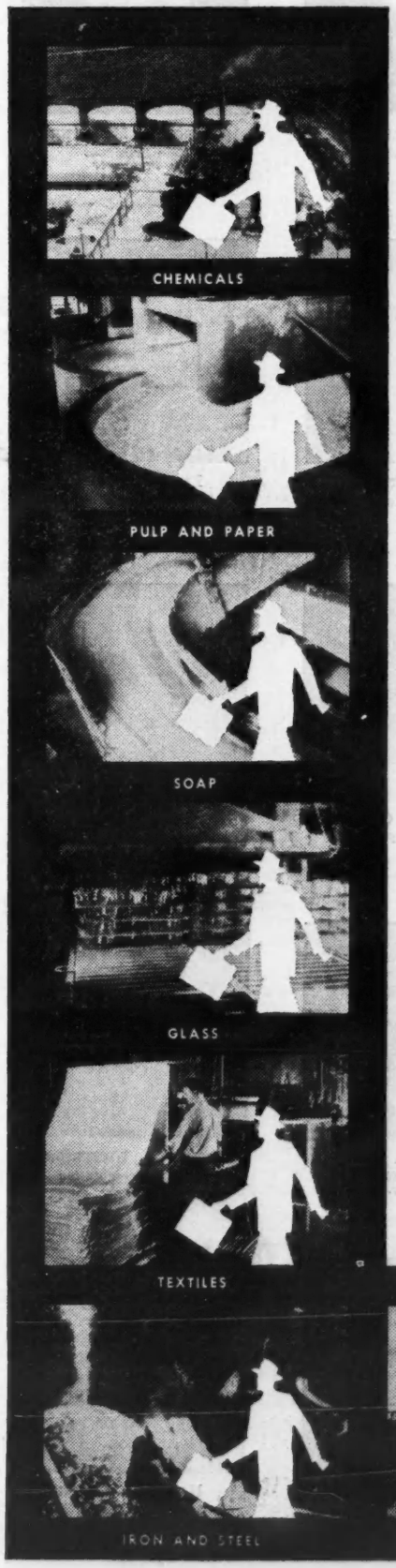
Petroleum, Fuel Oil, Diesel—Potassium Citrate, USP

	1953	1954
Petroleum, fuel oil, diesel, tanks, refinery, California	gal. .0825	.1025
New York	gal. —	.099
Penna., Western	gal. .0925	.1075
furnace, tanks, refinery, Arkansas, No. 2	gal. .08375	.085
No. 3	gal. .08	.08125
N. Y. Harbor, No. 2	gal. .0975	.095
Group 3, No. 1	gal. .08125	.08625
No. 2	gal. .07625	.08
No. 3	gal. —	.0775
range	gal. .0375	.08625
Pennsylvania western No. 1	gal. .1075	.11
No. 2	gal. .103	.104
No. 3	gal. .105	.1075
Lacquer, diluent, California, 170-225° F. b.r., tanks, ex tax, f.o.b. Los Angeles	gal. .167	.183
East coast, tanks, N. J. and N. Y. refinery	gal. .18	.18
Group 3, benzol-type, tanks, refinery	gal. .13125	.14125
toluol-type, tanks, refinery	gal. .12125	.13125
Mineral spirits, regular, California, tanks, ex-tax, f.o.b. San Francisco	gal. .147	.174
East coast, tanks, N. J., N. Y., refinery	gal. .16	.18
Group 3, tanks	gal. .10875	.11875
tankwagon, Boston	gal. .18	.19
Buffalo	gal. .185	.195
Chicago	gal. —	.279
Cleveland	gal. —	.22
Newark	gal. .17	.18
New York	gal. .165	.18
Philadelphia	gal. .165	.185
Pittsburgh	gal. .19	.18
Providence	gal. .185	.195
specially refined, tanks, refy., Watson, Calif.	gal. .228	.244
Borger, Tex.	gal. .24	.24
Houston, Tex	gal. .24	.24
Wood River, Ill.	gal. .2625	.2625
tank transport, dlvd., N. J	gal. .336	.32
tankwagon, N. J. N. Y. dlvd	gal. .37	.37
Naptha, cleaners, East coast, tanks, N. J., N. Y., refinery	gal. .16	.17
Group 3, tanks	gal. .11875	.12875
tankwagon, Newark	gal. .17	.18
New York	gal. .17	.18
Philadelphia	gal. .16	.17
V.M.&P., 225°-300° F., b.r., tanks, West coast, Los Angeles	gal. .152	.168
Portland, Ore	gal. .158	.174
San Francisco	gal. .157	.173
Seattle Wash	gal. .158	.174
East coast, N. J., N. Y., tanks	gal. .17	.18
Group 3, tanks	gal. .11875	.12875
tankwagon, Boston	gal. .195	.205
Newark	gal. .185	.195
New York	gal. .185	.195
Philadelphia	gal. .180	.195
Pittsburgh	gal. .20	.19
Solvent, partial aromatic, tanks, East coast, N. J., N. Y., 205°-292° F. b.r., 37°, 38° C. m.a.p.	gal. —	.26
17°-29, C. m.a.p	gal. —	.29
266°-383° F. b.r., 35° C. m.a.p	gal. —	.29
27°-28° C. m.a.p.	gal. —	.29
19° C. m.a.p	gal. —	.34
310°-392° F. b.r., 30°-38° C. m.a.p.	gal. —	.27
17°-19° C. m.a.p	gal. —	.35
330°-425° F. b.r., 32°34° C. m.a.p.	gal. —	.30½
25° C. m.a.p.	gal. —	.39½
18°-21° C. m.a.p.	gal. —	.35
rubber, California, tanks, ex tax, San Francisco,	gal. .157	.173
East coast, N. J., N. Y., tanks	gal. .17	.18
Group 3, tanks	gal. .11875	.11875
Stoddard, tanks, East coast, N. J., N. Y.	gal. .16	.17
Group 3	gal. .11375	.12375
Pennsylvania, western	gal. .17	.15
tankwagon, Boston	gal. .18	.19
Chicago	gal. —	.289
Cleveland	gal. —	.22
Los Angeles, ex tax	gal. —	.173
Newark	gal. .17	.18
New York	gal. .17	.18
Philadelphia	gal. .165	.165
Pittsburgh	gal. .19	.18
Sulphonate, oil soluble, 60-62% sulphonic content, tanks, works	lb. .175	.14
50-55% sulphonic content, tanks, works	lb. .135	.125
Phenobarbital, USP, dms., 100-lb. lots	lb. 4.50	4.00
Phenobarbital-sodium, USP, dms.	lb. 4.50	4.00
Phenol, 90-92% (cresol, 8-10%), tanks, frt. alld., E of Rockies	lb. .17	.14
82-84% (cresol, 16-18%), tanks, same basis	lb. .16½	.13½
39° or above, tar distilled, tanks, same basis	lb. .17½	.15½
USP, synthetic, tanks	lb. .18	.16
Phenolphthalein, USP, or yellow, bbls., dms., 2,000-lb. lots.	lb. 1.10	1.10
Phenothiazin, NF,, fib. dms., c.l., frt. adjusted	lb. .50	.53
Phenyl acetate, dms., 100-lb. lots, works	lb. .50	.50
Phenylacetaldehyde solution, 50%, bots.	lb. 2.40	2.40
100%, bots	lb. 4.00	4.00
Phenylacetamide, 125-lb. dms.	lb. 1.10	1.10
Phenylalanine, dextro-laevo, dms., works	lb. 27.00	27.00
Phenylcarbethoxy pyrazolone, 250-lb. fib. dms., dlvd. E.	lb. 3.60	3.60
Phenyldiethanolamine, dms., c.l., frt. alld.	lb. .40	.40
Phenylethanolamine, dms., c.l., works	lb. .69½	.69½
Phenylethyl acetate, dms.	lb. 1.20	1.35
b-Phenylethylamine, dms., 1,000-lb. lots, works	lb. —	1.10
Phenylethylphenyl acetate, bots.	lb. 4.05	3.95
Phenylhydrazin base, CP, bots.	lb. 3.00	3.00
Hydrochloride, com'l, kgs., works	lb. 1.75	1.75
purified, bots.	lb. 5.12	5.17
Phloroglucinal, com'l, fib., dms., works	lb. 6.40	6.40
CP, bots., fib dms., works	lb. 17.00	17.00
tech., fib dms., works	lb. 10.45	10.45
Phosgene, 150-lb. cyls., works	lb. .27½	.27½
Phosphate, rock, Curacao, Atlantic ports	ton. 45.00	45.00
Florida, land pebble, run-of-mine, washed, dried, unground, bulk c.l., mines, 70-68%, b.p.l., same basis	long ton. 4.35	4.68½
72%-70%, b.p.l., c.l., same basis	long ton. 5.00	5.68½
75%-74%, b.p.l., c.l., same basis	long ton. 6.00	6.68½
77%-78%, b.p.l., c.l., same basis	long ton. 7.00	7.68½
Phosphate rock, Florida, finely ground, 65%, b.p.l., basis 30% P_2O_5, minimum, bulk, c.l., mines,	short ton. 4.92	5.00
68%, b.p.l., basis 31% P_2O_5 minimum, mines.	short ton. 5.25	5.80
70%, b.p.l., basis 32% P_2O_5 minimum, mines.	short ton. 5.63	6.15½
Plus or minus usual bonus adjustment clause for oil and labor. Prices on entirely pebble 50c. per long ton higher.		
Phosphorus, red, amorphous, dms	lb. .46	.46
yellow, dms., c.l.	lb. .30	.48
Oxychloride, tankcars, works.	lb. .13	.14
Pentasulphide, solid, dms., c.l., works	lb. .11½	.11½
Pentoxide, dms., c.l., works.	lb. .12	.11½
Sesquisulphide, export, dms.	lb. .26	.31
Trichloride, tankcars, works.	lb. .13	.14
Phthalic anhydride, tanks, works, frt. equald	lb. .22	.19½
Phthalimide, 97-98%, works, frt. alld	lb. .65	.65
Phthalylsulphacetamide, fib. dms.	lb. 5.00	5.00
Pilocarpine hydrachloride, NF, bots., USP	oz. 5.25	5.25
Nitrate, USP, bots., vials	oz. 5.10	5.10
Pimento, Guatamala, bgs.	lb. .20	.20N
Jamaica, bgs	lb. .26	.34
Mexican, bgs	lb. .15½	.28
Pinetar, retort, tanks, bulk, works	lb. —	.35
Pinkroot, bls	lb. 2.50	3.00
Piperazine, hexahydrate, French Codex, bots.	kilo. 9.00	9.00
Piperidine, 98%, dms., frt. equald	lb. 1.75	2.90
Piperonyl butoxide, dms., dlvd. E.	lb. 5.00	4.50
Cyclonene, dms., dlvd. E	lb. 4.20	4.20
Pitch, burgundy, domestic, dms., c.l., l.c.l., works	100 lbs. 9.80	9.80
Coaltar, 140°-150°F, m.p., bbls., c.l., works	ton. 38.00	41.20
Cottonseed, dms., works	lb. .02¼	.02¼
Hardwood, paper bgs., c.l., works	lb. .02	.02
Linseed, dms.	lb. .00	.00
Pine, dms. incl., l.c.l. works, South	100 lbs. 7.50	7.60
Soybean, dms., works	lb. .05	.05
Platinum metal, works	oz. 90.10	93.00
Pleurisy root, bls.	lb. .45	.45
Podophyllin resin, NF, dms.	lb. 11.00	8.75
Pokeroot, bls.	lb. .22	.19
Polyoxyethylene sorbitan monostearate, 20,000 lbs., works	lb. .43	.43
tristerate, dms., 20,000 lbs., works	lb. .43	.43
Polystyrene, gran., gen'l use, colors, special, bgs, over 20,000 lbs., frt. alld	lb. .35½	.34½
standard, bgs.	lb. .35½	35½
crystals, heat resistant, bgs., c.l.	lb. .34	.34
standard, bgs., c.l.	lb. .33	.33½
Poppy seed, Dutch, bgs.	lb. .16½	.17¾
Polish, bgs.	lb. .15½	.17¾
Turkish, bgs.	lb. .13¼	.17¼
Potash, caustic, regular, flake, 88-92%, dms., c.l., works	100 lbs. 8.50	8.50
liquid, 45%, tanks, same basis	100 lbs. 3.875	3.875
solid, 88-92%, dms., c.l., works	100 lbs. 7.90	7.90
Potassium abietate, dms., works,	lb. .25	.25
Acetate, NF, dms	lb. .31	.31
Bicarbonate, USP, gran., dms.,	lb. .22	.22
powd., dms	lb. .24	.15
Bichromate, bgs., c.l., works,	lb. .14½	.15
Bromate, bbls., 1,000 lbs or more	lb. .50	.50
Bromide, USP, gran., bbls., kgs	lb. .34	.34
Carbonate, tech., calcined, bbls., c.l., works.	100 lbs. 8.25	9.00
hydrated, 83-85%, bbls., c.l., works	100 lbs. 6.75	7.60
USP, gran., bbls., dms	lb. .16½	.16½
powd., bbls., dms	lb. .21	.21
Chlorate, cryst., dms., c.l., works	lb. .09¾	.10¼
export, dms., 1 to 10 tons, works	lb. .13	.12¾
powd., dms., c.l., works	lb. .10	.10¾
NF, gran., dms	lb. .31	.31
Chloride, USP, cryst., dms	lb. .21	.21
gran. dms	lb. .15	.15
powd., dms.	lb. .24	.24
Chromate, tech., bgs.	lb. .32	.50
Citrate, USP, gran., dms.	lb. .37½	.41
powder, dms	lb. .40½	.40½



Take a trip with a

MATHIESON

Technical Service Man

This man, typical of the Mathieson Technical Service Staff, is experienced on an industry-wide basis in the handling and use of industrial chemicals. Every day, as a trip with a Mathieson Technical Service Man would show, brings up new problems on which his broad experience is invaluable. For example:

A paper mill in New England is visited and advised on super-bleaching with chlorine dioxide. A soap manufacturer in the Middle West wishes to discuss the advantages of low-iron caustic. A chemical plant in the East is counseled on the storage and handling of sulphuric acid. Several Southern textile mills are visited in connection with the storage of soda ash. A gray-iron foundry in Ohio is advised on controlling sulphur with Purite. A glass plant in the Southeast wants information on soda ash and nitrate of soda. A petroleum refinery in the Southwest seeks assistance on the handling of caustic soda, and several water works are advised on taste and odor control with chlorine dioxide.

And so it goes. More and more, industry is looking to Mathieson Technical Service for practical assistance on the handling and use of basic chemical raw materials. A call to your Mathieson representative is all that's needed to avail yourself of this industry-wide experience.

MATHIESON

MATHIESON CHEMICAL CORPORATION
Mathieson Industrial Chemicals Division
Baltimore 3, Maryland

2022

caustic soda • soda ash • chlorine • sulphur • bicarbonate of soda
dry ice and carbonic gas • ammonia • sodium nitrate • nitric acid
hydrazine products • sodium methylate • sodium chlorite • hypochlorite
products • sulphuric acid • ethylene glycols and oxide • methanol

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Export Manager

MILTON STERN
Ass't Sales Manager

FRED W. LOESER
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STANLEY T. OLDS
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SIDNEY L. NICKERSON
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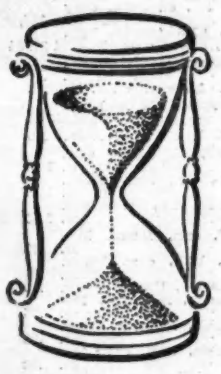
GEORGE H. BECKER
Sales Representative Eastern Illinois

DEXTER B. SPALL
Sales Representative W

HERITAGE...



1895 - 1954

The growth of Magnus, Mabee & Reynard, Inc., spans six momentous decades in the business and industrial life of our country.

During this period, operating in a competitive economy of free enterprise, the productive activities of a vast number of businesses, some large, some small, carried America to its present position of world leadership.

Each of these companies is justifiably proud of its individual contribution. The rich heritage of the past challenges and inspires each generation of workers.

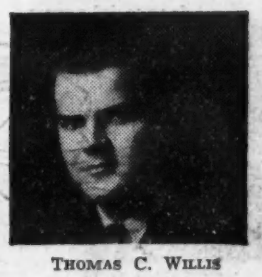
So it is with MM&R. We are proud of our world-wide activitives, proud of our technological advances, prouder still of the splendid group of men and women whose loyalty, efficiency and determination see us at our corporate best.

On the threshold of our sixtieth year, we rededicate ourselves to the service of our customers, so that our achievements in 1954 may be a worthwhile heritage for those who, with the passage of years, follow in our foot steps.

PINFANG HSIA
International Representative

GOSTA HEDSTROM
Chief, Analytical Laboratories

D. E. BELLAVIGNA
Production Manager

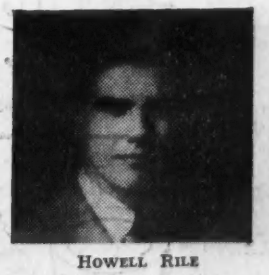


THOMAS C. WILLIS
Purchasing Agent

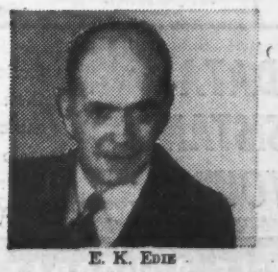
LOUIS SANTI
Export Sales Manager

BERNARD JEFFS
Director of Advertising

MARYANN JAMES
Ass't Sec.—Ass't Treasurer



HOWELL RILE
Sales Representative Metropolitan New York



E. K. EDIE
Traffic Manager

VINCENT PISARZ
Wholesale Drug Division

MAGNUS, MABEE & REYNARD, INC.

SINCE 1895... ONE OF THE WORLD'S GREATEST SUPPLIERS OF ESSENTIAL OILS

16 DESBROSSES STREET, NEW YORK 13, N. Y. • 221 NORTH LASALLE STREET, CHICAGO 1, ILL.

Potassium Fluoborate—Red, Venetian, 25%

	1953	1954
Potassium fluoborate, fib. dms., c.l., works	lb. .26	.30
Fluoride, dms., works	lb. .24	.32
Gluconate, dms	lb. .75	.75
Glycerophosphate, 75% solution, cbys	lb. 2.15	2.15
Guaiacolsulphonate, NF, dms.	lb. 2.10	2.10
Hydorxide, USP, pellets, 100-lb. dms., 1 to 100 dms	lb. .28½	.28½
Hypophosphite, NF, fib. dms., ton lots or less	lb. 1.00	1.00
Iodide, dms	lb. 2.15	2.15
Manure salt, 22% K_2O, bulk, mines	unit-ton. .21	.21
Metabisulphate, gran., dms.	lb. .20	.21
powd., dms	lb. .25	.25
Muriate, dom., 50-60% K_2O, bulk, Carlsbad, N. M.	unit-ton. 43	.43
Trona, Cal	unit-ton. .53	.53
50-51%, K_2O, paper bgs., Carlsbad, N. M.	ton.25.75	25.75
Oxalate, neutral, tech., fine gran., bbls., dms.	lb. .30	.30
Pentaborate, gram., bgs., c.l., works	ton.184.00	184.00
Perchlorate, dms., c.l., works,	lb. .14	.15
Permanganate, tech., dms., works	lb. .22½	.22½
USP, dms., works	lb. .24¾	.24¾
Persulphate, dms., c.l., works,	lb. .18	.18
Phosphate, tetrabasic, bbls., works	lb. .16½	.16½
Potassium prussiate, red, kgs.	lb. .60	.60
yellow, dms., ton lots	lb. .22½	.22½
Silicate, glass, bgs., c.l., works, solution, clarified, 29°, Be, 1:25, tanks, works 100 lbs.	5.50	5.80
tech., 29°, Be, 1:25, tanks works 100 lbs.	4.50	5.35
40.5°, Be, 1:20, tanks, works 100 lbs.	5.10	6.45
Silicofluoride, bbls., wo	½	.60
Stannate, dms., frt. alld E	lb. .74	.647
Sulphate, agricultural, K_2SO_4, bulk, works, basis 90%	ton.36.25	37.25
NF, VII cryst., bbls	lb. .31	.31
gran., dms	lb. .18½	.18½
powder, dms	lb. .16½	.16½
Thiocyanate, NF, cryst., dms., 100-lb. lots or less	lb. .85	.85
tech., works	lb. .77	.77
Titanate, ctns., c.l., works	lb. .11½	.14
Potassium-magnesium sulphate, bulk, min., 40% K_2SO_4, 18-50% MgO, works	ton.16.00	16.00
Potassium-titanium, fluoride, fib. dms., works	lb. .35	.39
Oxalate, bbls., dms	lb. .85	.85
Potassium, zirconium fluoride, fib. dms., c.l., works	lb. .50	.50
Pregnenolone, bots	gm. 1.50	.75
Acetate, bots	gm. 1.25	.70
Procaine hydrochloride, USP, dms., frt. alld	lb. 3.10	3.10
Progesterone, USP, 100 gms., bots	gm. 1.75	.79
Propane, com'l grade, tanks group 3	gal, .04	.04
Propyl acetate, normal, tanks, dlvd	lb. .1075	.1075
Gallate, dms., 2,000 to 100 lb. lots, works	lb. 3.90	3.90
Parahydroxybenzoate, USP, dms	lb. 2.30	2.30
Propylene dichloride, tanks, dlvd. E	lb. .07	.07
Oxide, tanks, dlvd., E	lb. .17½	.17½
Propyleneglycol, industrial, tanks, dlvd. E	lb. .18½	.14½
USP, tanks, same basis	lb. .17½	.15½
Methylether, tanks, same basis	lb. .18½	.18½
Propylthiouracil, bots., 50-kilo lots or more	kilo. .55	.53
Psyllium seed, black, bgs.	lb. .27	.80
blonde, bgs	lb. .19	.20
husks, bgs.	lb. .55	.48
Pumice, com., grd., coarse, O, ½, 1, 1½, 2, 3, bgs., ton lots.	lb. .03⅝	.03⅝
Italian silk-screen, coarse, bgs., ton lots	lb. .06½	.06½
fine, bgs., ton lots	lb. .04	.04
sun-dried, coarse, bgs., ton lots	lb. .02½	.02½
fine, bgs., ton lots	lb. .02½	.02½
Pyrethrum flowers, fine-grd., 0.9% pyrethrins, bbls., works	lb. .50	.50
powder, 1.3% pyrethrins, bbls., works	lb. .71½	.71½
liquid (20 to 1), basis 2 grams pyrethrins per 100 cc., odorless base, dms., works	gal. 9.75	8.35
Oleoresin, dewaxed, 20% for aerosol bombs, dms., works	lb.11.00	10.00
Pyridin, denaturing, dms., works and frt. equald	gal. 2.82	2.77
refd. 2°, non-ret., dms., l.c.l. same basis	lb. .90	.95
Pyridoxine hydrochloride, 100-gram bots	gram. .55	.55
Pyrites	long ton. NP	3.00
Pyrogallol, NF	lb. 3.25	3.25
Pyrophyllite, insecticide grade, 200 mesh, bgs., c.l., mines	ton.13.00	13.00
No. 3, 200 mesh, bulk, c.l., mines	ton.11.00	11.00
rubber grade, 140 mesh, bgs., c.l., mines	ton.11.50	11.50
standard, 200 mesh, bulk, c.l., mines	ton.12.50	12.50
230 mesh, bulk, c.l., mines,	ton.13.50	13.50
325 mesh, bulk, c.l., mines,	ton.16.75	16.75
Pyrophyllite in paper bgs., $3 to $3.50 per ton extra.		
Scrap, opaque, amber, cs., works	lb. .15	.20
black, cs., works	lb. .12	.12
mixed, mottled, cs., works,	lb. .11	.11
white, china, ivory, cs., works	lb. .12	.15
dense, cs., works	lb. .12	.12
translucent pastels, cs., works	lb. .14	.14
transparent, colorless, cs., works	lb. .20	.20
colors, cs., works	lb. .14	.14
shavings, opaque, amber, cs., works	lb. .12	.11
mixed, colors, cs., works,	lb. .12	.11

Q

Quebracho extract, clarified, grd., 70% tannin, bgs., c.l.	lb. .16½	.16½
liq., 35% tannin, tanks, same basis	lb. .08¼	.08¼
solid, clarified, 64% tannin, bgs., c.l., ex dock, duty extra	lb. .12½	.12½
ordinary, 63% tannin, bgs., c.l., same basis	lb. .11 31/64	.11 31/64
Quercitron extract crystals, No. 1 bbls., l.c.l.	lb. .40	.40
liquid, No. 1 bbls., c.l	lb. .19	.19
Quicksilver, flasks (76 lbs.) net	flask.218.00	189.00
Quince seed, bgs.	lb. .80	1.50N
Quinidine, NF, V, cryst., cns., 100-oz. lots	oz. 1.90	1.15
powd., precip., cns., 100-oz. lots	oz. 1.85	1.17
Sulphate, USP, cns., 100-oz. lots,	oz. 1.00	.87
Quinine, NF, cns., 100-oz. lots,	oz. .70	.54
Bisulphate, USP, cns., 100-oz. lots	oz. .51	.37½
Dihydrochloride, USP, cns	oz. .70	.54
Ethylcarbonate, NF, cns., 100-oz. lots	lb. .75	.63½
Hydrobromide, NF, cns. 50-oz. lots	oz. .63	.47½
Hydrochloride, USP, cns., 100-oz. lots	oz. .63	.47½
Phosphate, NF, cns., 100-oz. lots	oz. .76	.61
Salicylate, NF, cns., 100-oz. lots	oz. .66	.53
Sulphate, USP, cns., 100-oz. lots	oz. .56½	.42
Quinine and Urea hydrochloride, NF, cns	oz. .68	.56
Quinolin, tanks, frt. equald	lb. .50	.50

R

R salt, paste, basis, 100% dms., frt. alld	lb. .83	.83
powd., basis 100%, frt. alld.	lb. .88	.88
Red, BON acid maroons, pure, bbls	lb. —	1.75
resinated, bbls.	lb. —	1.50
arylid, deep shades, bbls	lb. 3.60	3.60
light medium shades, bbls	lb. 2.75	2.75
light shades, bbls.	lb. —	2.75
maroons, pure, bbls.	lb. 1.75	3.60
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies	lb. 4.30	4.30
light shade, bbls., same basis	lb. 4.00	4.00
medium shade, bbls., same basis	lb. 4.25	4.25
medium-light shade, bbls., same basis	lb. 4.05	4.05
orange shade, bbls., same basis	lb. NP	NP
lithopone, deep shade, bbls., same basis	lb. 1.76	1.93
light shade, bbls., same basis	lb. 1.61	1.70
maroon shade, bbls., same basis	lb. 1.85	2.05
medium shade, bbls., same basis	lb. 1.71	1.85
medium-light shade, bbls., same basis	lb. 1.66	1.77
orange-red, shade bbls., same basis	lb. 1.57	1.64
Red cadmium lithopone, all shades, in smaller pkgs., 5c. per lb. higher; all prices are 1c. per lb. higher ex whse., Los Angeles and San Francisco.		
Eosin toner, bbls., works	lb. 1.60	1.60
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N.Y	lb. .12½	.12¾
Iron oxide, pure, 98% ferric oxide, bgs., c.l., works	lb. .12¼	.12¾
natural 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa.; Copley, O.; Easton, Pa.; E. St. Louis	lb. .05¾	.06
Lake C toner, alizarin, bbls., works	lb. 1.10	1.10
Lithol toner, bbls., works	lb. .79	.79
rubin toner, pure, bbls., works	lb. 1.50	1.50
resinated, bbls., works	lb. 1.40	1.40
Virginia-type, bbls., works,	lb. 1.40	1.40
Maroon toner MNPT, kegs, works	lb. 3.60	3.60
Metallic, bbls., c.l., works	lb. .02½	.02½
Oxide, Persian gulf, bgs., c.l. works	lb. .06¾	.06¾
Para toner, bbls	lb. .85	.95
Chlorinated, kgs.	lb. 1.10	1.10
Spanish oxide, bbls., c.l., ex dock	lb. .05¾	.05¾
Toluidin toner, deep shades, kgs., works	lb. 1.40	1.50
light shades, kgs., works,	lb. 1.40	1.50
Rhodamine, molybdated, PMA, kegs	lb. 4.90	5.35
tungstated, PTMA, works, kegs	lb. 6.35	6.15
Turkey, bbls., works	lb. .14½	.16
Tuscan, bbls., frt. equald	lb. .24½	.24½
Venetian, 15%, bgs., works	lb. .0350	.0350
20%, bgs., works	lb. .04	.0475
25%, bgs., works	lb. .0450	.0525

for special papers
for electroplating
for soap
SOAP
for ceramic ware
for vitreous enamel
CHEMICALS
derived from
Tin · Antimony · Zirconium
for immersion plating
for textiles
for plastics
for glazed ceramics
for ceramic specialties
for porcelain
for glass
for oil, lubricants
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METAL & THERMIT CORPORATION • CHEMICAL DIVISION 100 East 42nd St., New York 17, N. Y.

		1953	1954
Red, Venetian, 30%, bgs., works.	lb.	.0475	.0650
35%, bgs., works	lb.	.05	.0575
40%, bgs., works	lb.	.0525	.0625
Vermilion, Amer., bbls.	lb.	.32	.32
Quicksilver, ctns.	lb.	3.90	3.56
Watchung type, bbls	lb.	1.95	1.95
Red, precipitate, NF, powd., fib. dms	lb.	4.37	4.37
Red saunders, NF, powd., bbls.	lb.	.35	.35
Rennin, NF, powd.	lb.	6.25	6.25
Resorcinol, tech., grade, dms., works	lb.	.82½	.77½
USP, cryst., dms., works	lb.	2.75	2.75
powd., dms., works	lb.	2.95	2.95
Monoacetate, NF, dms.	lb.	—	3.25
Rhodinol 5-lb. cns.	lb.	40.00	25.00
Rhubarb root, China, whole cs.	lb.	.85	.75
powdered, bbls.	lb.	.95	.90
India, whole, bgs.	lb.	.35	.35
powdered, bbls.	lb.	.40	.43
Riboflavin, USP, bots. dlvd	kilo.	100.00	100.00
readily soluble, bots. dlvd	kilo.	100.00	100.00
Rice bran concentrate, dms., Cedartown, Ga	lb.	.79	.79
Rochelle salt, USP, gran., powd., dms., c.l.	lb.	.32½	.32½
Rotepone, CP, bbls., works	lb.	20.00	20.00
tech., bbls., works	lb.	16.00	16.00
Rottenstone, bgs., 5-ton lots, ex-whse	lb.	—	.03
Rutin, NF, fib. dms., 25 kilo lots	kilo.	27.50	25.00
Ryania, 100% powd., bgs., works.	lb.	.20	.20

S

Sabadilla seed, powd., bbls.	lb.	.70	.49
activated, ground with lime, bbls	lb.	.45	.35
Saccharin, USP, gran., soluble, 1,000-lb. lots	lb.	1.60	1.60
powd., soluble, insoluble, dms., 1,000-lb. lots	lb.	1.70	1.65
Saffron, Spanish, USP, tins	lb.	21.50	25.00
Safrol, dms.	lb.	.72	.85
Sage, Cretan, bls.	lb.	.11½	.11
Dalmatian, bls.	lb.	.45	.43
Italian, Officinalis, bls.	lb.	.18	.15½
Sago flour, raw, bgs.	lb.	.07½	.07¼
refined, bgs.	lb.	.09	.08¾
Salol, NF, gran., bbls., kgs.	lb.	1.05	1.10
Salt, rock, paper bgs., c.l., 100 lbs.		.63	.98
table, vacuum, common, fine, bgs., works, c.l. 100 lbs.		.77	1.12
Saltcake, dom., bulk, works, basis 100% Na_2SO_4	ton.	17.00	19.00
Saltpeter, cryst., bbls., 10 ton lots	100 lbs.	14.40	14.40
gran., bbls., 20 ton lots.	100 lbs.	9.75	9.75
powd., bbls., 20 ton lots.	100 lbs.	10.75	10.75
NF, gran., dms.	lb.	.09¾	.09¾
Sandalwood chips, East Indies, bgs	lb.	.65	.65
Sanguinarine nitrate, bots.	oz.	4.75	4.75
Santonin, NF, dom., cryst., powd., dms., cns	lb.	110.00	76.50
imported, cryst., powd., cns.	lb.	110.00	76.50
Saponin, No. 1, 100-lb. dms	lb.	2.75	2.75
Sarsaparilla root, dom., bls.	lb.	.45	.45
Honduras, bls.	lb.	.38	.45
Mexican, bls.	lb.	.22	.35
Sassafras root bark, ord., bls	lb.	.44	.45
select, bls.	lb.	.55	.60
Schaeffer's salt, paste, dms., frt. alld	lb.	.80	.85
powder, bgs., frt. alld	lb.	.80	.95
Scopolamine hydrobromide, bots.	oz.	14.00	12.25
Seidlitz mixture, bbls., 5,000 lbs.	lb.	.30½	.30½
Selenium, powd., dms., dlvd	lb.	3.25	4.25
Senega root, bls.	lb.	2.15	2.30
Senna leaf, Alex., half-leaf, bls.	lb.	.22	.19
sifting, bgs.	lb.	.18	.17
Tinnevelly, No. 1, bls.	lb.	.20	.17
No. 2, bls.	lb.	.18	.13
No 3, bls.	lb.	.14	.11
pods, bls., bxs.	lb.	.35	.14
Serpentaria root, bls.	lb.	5.00	4.85
Sesame seed, Nicaragua, hulled, bgs	lb.	.21	.32
natural, bgs.	lb.	.13¾	.17N
Shellac, bleached, bonedry, bgs., 1,500 lbs	lb.	.43	.49
bbls., 1,500-lb. lots	lb.	.44	.50
kgs., 1,500-lb. lots	lb.	.46	.52
refined, bgs., 1,500-lb. lots.	lb.	.53	.59
bbls., 1,500-lb. lots	lb.	.54	.60
kgs., 1,500-lb. lots	lb.	.56	.62
Lemon, No. 1 bgs	lb.	.32	.40
No. 2, bgs.	lb.	.29	.38
Superfine, bgs., 10-bg. lots	lb.	.28	.36
TN, bgs., 10-bg. lots	lb.	.25	.35
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., Ill., works.	ton.	25.00	25.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works	ton.	20.00	20.00
140 mesh, bgs., c.l., works.	ton	15.00	15.00
Silicon tetrachloride, tech., dms., c.l., works	lb.	.16	.16
Silver bullion, ingots, cs	oz.	.83¼	.85¼
Cyanide, fib. dms., 2,500-oz. lots	oz.	.75⅞	.77⅞
Nitrate, CP, cryst., bots., 2,500 oz lots	oz.	.53⅝	.54¾
USP granular silver nitrate 4c. per oz. higher.			
Proteinate, mild, USP, bots., dms., 1,000 oz. lots	oz.	1.05	1.05
strong, NF, bots., dms., 1,000 oz. lots	oz.	1.00	1.00
Slate flour, bgs., c.l., works	ton.	11.00	11.00
Soapbark, bls.	lb.	.28	.28
crushed, bls., bbls.	lb.	.33	.32
powd., bbls.	lb.	.35	.35
Soda ash, dense, 58%, bulk, c.l., works	100 lbs.	1.30	1.75
light, 58%, bulk, c.l., works. 100 lbs.	lb.	1.20	1.65
Caustic, flake, powd., 76%, c.l., works	100 lbs.	3.75	4.10
liquid, 50%, sellers' tanks, works, dry basis	100 lbs.	2.55	2.55
50%, rayon type, tanks, works, dry basis	100 lbs.	2.65	2.65
70%, sellers' tanks, works, dry basis	100 lbs.	2.65	2.65
solid, 76%, dms., c.l., works.	100 lbs.	3.35	3.70
Sal, bgs., c.l., works	100 lbs.	1.40	1.40
Soda-lime, USP, dms.	lb.	.23	.23
Sodium acetate, anhyd., bgs., c.l., works	lb.	.12	.12
NF, gran., dms., works	lb.	.16	.12½
Alginate, refined, bbls., works.	lb.	.83	.83
NF, white, powd., dms., works, ton lots	lb.	1.30	.87
Antimoniate, bbls., c.l., dlvd. E	lb.	.30	.26½
Arsenate, dms., c.l., works	lb.	.12½	.13½
Arsenite, dms., works	lb.	.13½	.13½
solution, dms., works	gal.	.70	.70
Ascorbate, dms., 25-50 kilo lots.	kilo.	21.00	21.00
Benzoate, tech., bbls., dms., 100 lbs. or more	lb.	.375	.39
USP, bbls., dms., 100 lbs. or more	lb.	.445	.46
Bicarbonate, USP, gran., bgs., c.l., works	100 lbs.	2.50	2.70
powd., bgs., c.l., works. 100 lbs.		2.10	2.30
Bichromate, bgs., c.l., works.	lb.	.11	.11½
Sodium bifluoride, bbls., c.l., works, frt. equald	lb.	.13¾	.17½
Bisulphate, bulk, c.l., works. 100 lbs.		2.00	2.00
Bisulphite, c.l., works	100 lbs.	4.05	4.50
solut., 35°, bbls., c.l., works. 100 lbs.		1.40	1.40
Bromide, USP, bbls., kgs., works	lb.	.34	.34
Cacodylate, NF, jars, dms	lb.	8.52	8.52
Carbonate, monohydrated, bgs., c.l., works	100 lbs.	2.65	2.90
Chlorate, cryst., dms., c.l., works	lb.	.08¼	.08¾
Chloride, USP, dms.	lb.	.05	.05
Chlorite, tech., dms., works.	lb.	.58	.58
Chloroacetate, tech., dms., c.l., works	lb.	.24	.24
Chromate, dms., c.l., works.	lb.	.12¾	.13¼
Citrate, anhyd., dms.	lb.	.60	.60
USP, VIII, gran., dms.	lb.	.22½	.26
USP, XIV, gran., dms	lb.	.28	.29½
Sodium citrate, USP, XIV, powd., prices ½c. higher.			
Cyanate, dms., 1,000-lb. lots, works	lb.	.85	.85
Cyanide, flake, 96-98%, dms., c.l. or 20,000-lb. lots.	lb.	.168	.178
Diacetate, 33-35% acidity, 250-lb. dms., works	lb.	.14	.14
anhydrous, dms., c.l., works.	lb.	.17	.17
Fluoride, white, 90%, bbls., c.l., works	lb.	.11	.12½
Fluoracetate, monobasic, 8-oz. tins, 50 to a case, works	lb.	12.00	12.00
Formate, bgs., c.l., dlvd.	100 lbs.	7.10	7.60
Gentisate, 100-lb. fib dms	lb.	8.50	8.50

		1953	1954
Sodium gluconate, tech., bgs.	lb.	.35	.35
refined, dms.	lb.	.80	.80
Glutamate, monobasic, dms., c.l.	lb.	1.67	1.70
Glycerophosphate, NF, cryst., bbls.	lb.	1.80	2.10
powder, bbls.	lb.	1.85	2.15
solution, 75%, cbys.	lb.	1.06	1.45
Hydride, dms., works.	lb.	2.00	2.00
Hydrosulphite, dms., c.l., frt. alld	lb.	.24½	.23
Hydroxide, NF, pellets, dms.	lb.	.18½	.18½
Hypophosphite, NF, ton lots or less, dms	lb.	.95	.95
Hyposulphite, photo grade, bgs., c.l., works	100 lbs.	4.00	4.50
pea crystals, bgs	100 lbs.	4.50	4.50
gran., bgs., c.l., works.	100 lbs.	4.40	4.75
tech., bgs., c.l., works.	100 lbs.	4.00	4.50
Iodide, USP, dms., bots.	lb.	2.69	2.80
Lactate, edible, 50%, dms., cbys., works	lb.	.21½	.21½
60%, dms., cbys., works	lb.	.16½	.26½
tech., 50%, dms., cbys., works.	lb.	.16½	.16½
Laurylsulphate, tanks, dlvd.	lb.	.23	.23
Metaborate octahydrate, gran., bgs., c.l., works	ton.	78.50	78.50
tetrahydrate, c.l., bbls., works	ton.	199.50	199.50
Metallic, bricks, tanks, works.	lb.	.17	.17
Metanilate, bbls., frt. alld.	lb.	.62	.62
Metasilicate, anhyd., bbls., c.l., works	100 lbs.	4.70	4.85
Pentahydrate, dms., c.l., works	100 lbs.	4.20	4.80

Red, Venetian, 30%—Sodium Phenosulphonate

		1953	1954
Sodium molybdate, crystals, bbls., works	lb.	.75	.75
powd., anhyd., dms., works.	lb.	1.05	.85
Monohydrate, (see Carbonate Monohydrated).			
Naphthionate, bbls.	lb.	.70	.70
Nitrate, crude, dom. bulk, c.l., works.	ton.	51.00	47.00
imp., bulk, Atl., Gulf, Pac. whse.	ton.	53.50	49.50
Nitrite, USP, bbls., c.l., works, frt. equald	lb.	.07¼	.07¾
Orthosilicate, anhyd., dms., c.l., works.	100 lbs.	5.85	6.00
hydrated, flake, bbls., c.l., works.	100 lbs.	4.75	4.75
Oxalate, neut., bgs., works.	lb.	.10½	.1085
Para-aminobenzoate, dms., 1,-000-lbs. or more	lb.	3.00	2.40
Para-aminosalicylate, dms., 1,000-lbs. or more frt. adjusted	lb.	4.00	3.75
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald.	lb.	.25½	.25½
pellets, bgs., c.l., same basis	lb.	.25	.25
powd., bgs., c.l., same basis.	lb.	.24	.24
Perborate, USP, tech., bbls., c.l., works	lb.	.193	.193
Peroxide, dms., c.l., dlvd. E. of Miss.	lb.	.1860	.1860
Phenosulphonate, USP, IX gran., dms.	lb.	.44	.44
powd., dms.	lb.	.47	.47

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CARDIS® ONE	195-200	1-2	4-5	12-15	55-65	EMULSIFIABLE PETROLEUM WAX
CARDIS® 314	184-189	4-6	4-5	13-15	45-50	EMULSIFIABLE PETROLEUM WAX
CARDIS® 319	180-185	5-7	4½-6	18-20	65-70	EMULSIFIABLE PETROLEUM WAX
CARDIS® 320	180-185	5-7	4-5	28-30	75-80	EMULSIFIABLE PETROLEUM WAX
CARDIS® 262	195-200	4-6	BROWN	14-16	40-45	SPECIALLY PROCESSED PETROLEUM WAX
FORTEX	190-200	3-5	2½-3½	0.0	0.0	MICRO-CRYSTALLINE HARD AND PLASTIC
MEKON® B-20 A-20 Y-20	190-195 190-195 190-195	3-5 3-5 3-5	BROWN-BLACK AMBER-6 MAX. YELLOW-3-3½	0.0	0.0	MICRO-CRYSTALLINE HARD AND BRITTLE
WARCO WAX 180	180-185 180-185	4-7 4-7	WHITE BROWN	0.0	0.0	MICRO-CRYSTALLINE HARD AND BRITTLE
WARCO WAX 150-A	145-155 145-155	15-20 15-20	YELLOW 1-2 BROWN	0.0	0.0	MICRO-CRYSTALLINE PLASTIC
WARCOSINE	150-155	15-20	WHITE	0.0	0.0	MICRO-CRYSTALLINE PLASTIC
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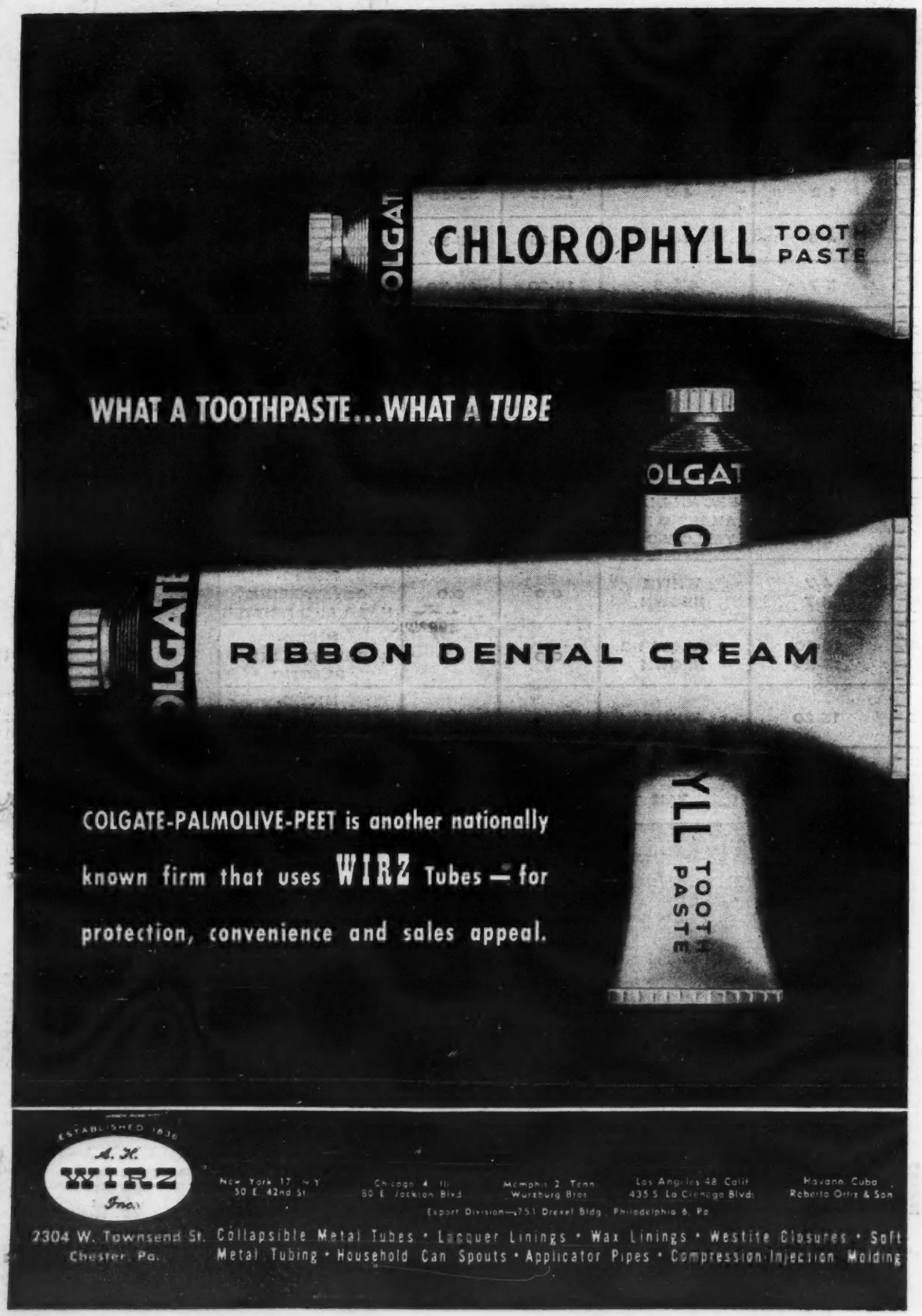
Sodium phosphate, dibasic, anhyd., bgs., c.l., works 100 lbs.	7.25	7.45
monobasic, anhyd., bgs., c.l., works 100 lbs.	8.05	8.45
duohydrate, bgs., c.l., works 100 lbs.	6.65	7.05
USP, dried powd., bgs., dms., works lb.	.19	.19
tribasic, cryst., bgs., c.l., works, frt. equald, 100 lbs.	4.45	4.20
Prussiate, yellow, 10-ton lots, bgs. lb.	.13½	.13½
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lbs.	10.00	10.75
ferric, dms., 1,500-lb. lots, works lb.	.40	.31
tetrabasic, anyhd., bgs., c.l., works, frt. equald, 100 lbs.	7.50	7.90
Salicylate, USP, dms. lb.	.63	.68
Sesquicarbonate, bgs., c.l., works 100 lbs.	2.10	2.10
Sesquisilicate, hydrated, bgs., c.l., works 100 lbs.	4.25	4.90
Silicate, liquid, 40°, 1:3.2 turbid, tanks, works ton.	19.00	20.00
47°, turbid, 1:2.9, tanks, works 100 lbs.	1.45	1.60
solid, 1:3.2, works ton.	52.50	57.50
Silicofluoride, bbls., c.l., works, lb.	.07	.07
Stannate, dms., works, frt. alld. E lb.	6.60	4.78
Stearate, tech., dms., works lb.	.70	.70
USP, dms., works lb.	.70	.70
Sodium sulphanilate, bbls., works, lb.	.22	.22
Sulphate, NF VII, dried powd., dms. lb.	.22½	.22½
tech., anhyd., bgs., c.l., works frt. alld. to $10 100 lbs.	2.25	2.35
rayon grd., bgs., c.l., works, ton.	27.00	29.00
USP, cryst., gran. fib. dms, lb.	.17½	.17½
Sulphide, flake, bbls., c.l., works E. frt. equald, 100 lbs.	5.00	5.25
Sulphite, anhyd., bgs., c.l., works 100 lbs.	2.73	3.00
powder, bbls., c.l., works, 100 lbs.	6.75	7.25
Sulphydrate, flake, 70-72%, dms., c.l., works lb.	.05¾	.06½
liquid, 34-40%, 100% basis, tanks, works ton.	100.00	111.00
Tetrasulphide, liquid, 40%, dms., c.l., works lb.	.03½	.03½
Thiocyanate, CP, dms. lb.	.55	.55
tech., dms., works lb.	.30	.377
Thiosulphate, NF, cryst., bbls, lb.	.10½	.12½
Titanate, ctns., c.l., works lb.	.10	.10½
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E lb.	.37½	.37½
Tripolyphosphate, bgs., c.l., works, frt. equald lb.	.0785	.0825
Tristearate, fib. dms., 20,000 lbs., works lb.	.33	.33
Tungstate, tech., kgs., dlvd. E. lb.	3.15	2.40
Sodium-ammonium phosphate, bbls., works, frt. equald. lb.	.23	.23
Sodium-formaldehyde sulphoxylate, c.l., dms., dlvd lb.	.25½	.23½
Sodium-zirconyl sulphate, fib. dms., 1,000 lbs. or more, works lb.	.28	.28
Solvent naphtha, coaltar, refined, tanks, works gal.	.31	.31
high flash, tanks, works gal.	.31	.31
Sorbitan monostearate, fib. dms., 20,000 lbs. works lb.	.32	.32
Sorbitol, cryst., pellets, dms., c.l., works lb.	.30	.30
powd., dms., ton lots to 5 tons, works lb.	.33	.36
solution, com'l, aqueous, tanks, works lb.	.15	.24½
aqueous, tanks, works lb.	.23¼	.23¼
Soybean meal, 41% bulk, Decatur ton.	70.50	72.50
protein, chemically isolated, 40,000 lbs. to 60,000 lbs. dlvd lb.	.23½	.23
mechanically refined, bgs., 40,000 lbs., same basis, lb.	.0605	.0605
Sparteine sulphate, cns. oz.	.85	.85
Spruce extract, liq., reg., tanks, works lb.	.01¾	.01¾
powd., super, bgs., c.l., works lb.	.05½	.05½
Squill, red, fortified, powd., bbls., -bxs lb.	1.60	1.60
white, bls. lb.	.12	.12
powd., bbls., bxs. lb.	.18	.18
St. John's bread, edible, bls., lb.	.10	.13
Starch, corn, pearl, paper, bgs., c.l., N. Y. 100 lbs.	7.14	7.14
powd., paper, bgs., c.l., 100 lbs.	7.26	7.26
Potato, dom., Idaho, bgs., c.l., works lb.	.06½	.06½
Maine, bgs., c.l., works, lb.	.10½N	.05¾
Rice, bgs., c.l. lb.	.15	.16
Wheat, bgs. lb.	.0675	.0755
Stavesacre seed, bgs. lb.	.60	.60
Stillingia root, bls. lb.	.28	.30
Stomach substance, not USP, fib. dms. lb.	2.95	2.95
Storax, USP, cs. lb.	1.25	.85
Stramonium leaves, bgs. lb.	.16	.18
Streptomycin, either hydrochloride or sulphate, bulk, gram.	.21	.17
Strontium bromide, NF, cns., dms. lb.	.77	.77
Carbonate, 92%, dms. lb.	.23	.33
Chromate, bbls., works lb.	.50	.46
Iodide, jars, 25 lbs. lb.	3.37	3.42
Nitrate, bbls., cs., works lb.	.10¼	.11
Oxalate, bbls., works lb.	.42	NP
Salicylate, NF, dms. lb.	1.65	1.65
Sulphate, air-floated, 90%, 325 mesh, bbls., works ton.	56.70	56.70
Strontium-calcium sulphide, phosphorescent, dms., works, lb.	2.80	2.80
Strophanthin, NF, bots. oz.	25.00	25.00
Strophanthus seed, Kombe, biologically tested, bgs. lb.	3.25	3.50
Strychnine, NF, powd., cns., 100-oz. oz.	1.25	1.10
Phosphate, NF, cns., 100-oz. oz.	1.14	1.14
Sulphate, USP, powd., cns., 100-oz. oz.	1.00	.85
Styrene monomer, tanks, works lb.	.21	.21
Stryrolyl acetate, bots. lb.	1.47	1.45
Sucrose, octa-acetate, denat., grd. lb.	.71	.71
Sulphabenzamide, dms., works lb.	4.00	4.00
Sulphadiazin, USP, microcrystals, dms. lb.	10.60	10.60
powder, dms. lb.	10.25	10.25
Sulphadiazin-sodium, USP, dms. lb.	11.25	11.25
microcrystals, dms. lb.	10.60	10.60
Sulphaguanidin, USP, dms. lb.	4.00	2.50
Sulphamerazin, USP, microcrystals lb.	10.65	10.65
Sulphamerazin-sodium, USP, dms. lb.	11.25	11.25
Sulphamethazine, microcrystals, dms. lb.	8.90	8.90
powd., dms. lb.	8.50	8.50
Sulphanilamide, USP, 30-80 mesh, dms. lb.	1.40	1.40
micro crystals, dms. lb.	1.70	1.70
powder, dms. lb.	1.30	1.30
Sulphanilamidoquinoxaline, veterinary, dms. lb.	6.50	6.50
Sulphapyridin, NF, powd., bots., tins lb.	7.00	7.00
Sulphapyridin-sodium, monohydrate, powd., dms. lb.	7.50	7.50
Sulphathiazole, USP, microcrystals, dms. lb.	3.15	3.15
powder, dms. lb.	2.80	2.80
Sulphathiazole-sodium, USP, powd., dms lb.	2.80	3.05
Sulphur, commercial, flour, bgs. mines 100 lbs.	2.05	2.30
bbls., mines 100 lbs.	2.20	3.05
lump, bgs., mines 100 lbs.	1.70	2.20
bbls., mines 100 lbs.	2.00	2.63
crude, bulk, c.l., mines, contract long ton.	21.00	26.50
f.o.b. vessels, Gulf ports, export long ton.	25.00	31.00
domestic and Canada long ton.	22.50	28.00
refined, flowers, USP, bgs., mines 100 lbs.	3.60	4.00
bbls. 100 lbs.	4.75	5.25
flour, light, bgs., mines, 100 lbs.	3.35	3.60
bbls., mines 100 lbs.	4.25	4.50
lump, bgs., mines 100 lbs.	2.90	3.30
rolls, bgs., mines 100 lbs.	3.35	3.85
bbls., mines 100 lbs.	3.80	4.40
salt block, bgs., mines, 100 lbs.	3.10	3.50
virgin block, bbls., mines 100 lbs.	3.05	3.45
rubbermakers, com'l, regular, bgs., mines 100 lbs.	2.25	2.40
bbls., mines 100 lbs.	2.40	3.55
98-100% passing through 325 mesh, bgs., mines, 100 lbs.	2.25	2.50
bbls., mines 100 lbs.	3.40	3.65
refined, bgs., mines 100 lbs.	2.85	3.25
bbls., mines 100 lbs.	2.65	4.30
treated, 2.5% mineral oil, bgs., mines 100 lbs.	2.45	2.70
bbls., mines 100 lbs.	3.80	3.85
10% pine tar, bgs., mines, 100 lbs.	3.65	3.90
Dichloride, tankcars, same basis lb.	.03¼	.03¾
Dioxide, liquid, com'l, cyls., works lb.	.09	.09
multi-unit cars, works, lb.	.0535	.0535
tanks, works lb.	.045	.043
refrigeration cyls., l.c.l., dlvd lb.	.20	.24
Monochloride, tanks, same basis lb.	.03¼	.03¾
Washed, NF, bot lb.	.11	.11
Sumac leaf, 28%, grd., bgs., ex dock short-ton.	110.00	120.00
ground, same basis ton.	110.00	120.00
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk., Balti. unit-ton.	.86	.88
triple, 48% or more, a.p.a., pulv., bulk, East Tampa, Fla. unit-ton.	.91	.98

T

2, 4, 5-T, dms., c.l., works lb.	1.60	1.40
Isopropyl ester, dms., c.l., works lb.	1.70	1.45
Talc, dom., ordinary, grd., Calif., bgs., c.l., works ton.	25.00	32.00
Vermont, off color grd., c.l., works ton.	14.00	14.00
fibrous, New York, grd., c.l., bgs., works ton.	25.00	25.00
95.5%, 325 mesh, bgs., c.l., works ton.	27.00	27.00
99.95%, micronized, bgs., works ton.	36.00	36.00
imp., Canadian, grd., bgs., c.l., ton.	15.25	15.25
Tallow, edible, tanks, dlvd lb.	.07½	.11¾N
inedible, extra, tanks, dlvd lb.	.05⅝	.07⅛
fancy, bleachable, tanks, dlvd lb.	.05⅝	.07¾
No. 1 tanks, dlvd lb.	.04½	.06¾
special, tanks, dlvd lb.	.04⅜	.07⅛
sulphonated, 25%, dms., l.c.l. lb.	.06½	.07⅛
50%, dms., c.l. lb.	.09½	.08½
Tankage, animal feeding, 9-11% ammon., bulk unit-ton.	6.75	6.50
Chicago unit-ton	7.50	7.50
Tapioca flour, high grade, bgs., ex whse lb.	.15N	.14½N
Tar acid oil, 15-18%, tanks, frt. equald gal.	.39	.39
25-28% tanks, frt. equald. gal.	.46	.46
50-53%, tanks, frt., equald., lb.	.62½	.62½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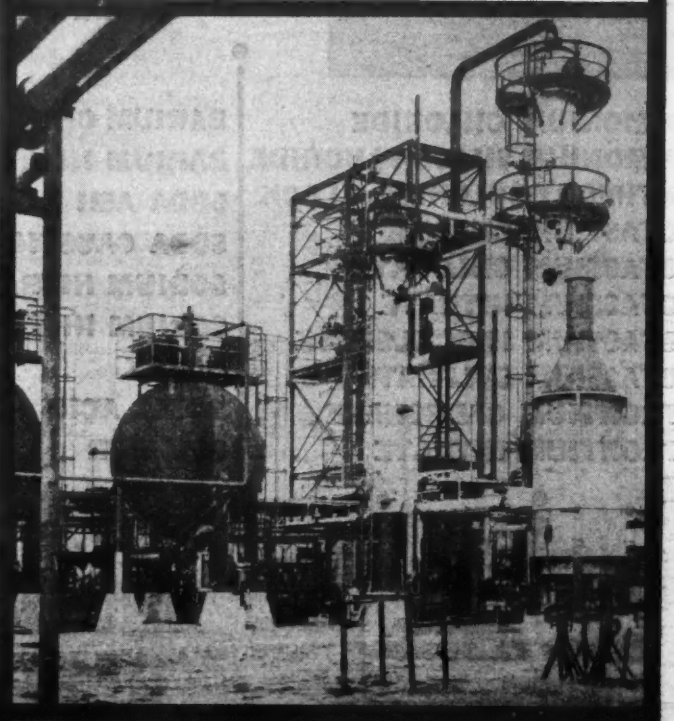
PETROLITE

CROWN WAXES

MICROCRYSTALLINE AND SYNTHETIC



Petrolite waxes are the product of a modern, up-to-date refinery, exclusively devoted to the refining of high quality waxes. Petrolite wax products are widely used in the manufacture of paste and emulsion polishes, carbon paper, printing inks, paper coatings, packaging and in many highly specialized fields. Their advantageous specifications and unique physical characteristics may help you achieve substantial economies and improvements in your wax products. Complete information and samples are yours for the asking.

Crown Wax No.	TYPE	Minimum Melting Point °F	Pen.	Color N.P.A.	Acid No.	Sap. No.	FEATURES
15	OXIDIZED MICROCRYSTALLINE	180	4-6	4-5	14-16	50-60	High Terpene phenolic resin compatibility.
23		180	4-6	4-5	20-25	55-65	Hardness, gloss, non-tacky.
36		180	5-7	5-6	30-35	75-85	Saponifiability.
50		180	3-5	dark	10-20	65-75	Excellent carbon dispersing properties.
180		180	15 max.	2-2½	Nil	Nil	Plasticity, high softening point, anti-blocking, odorless, tasteless.
200		190	8 "	brown	"	"	
500		190	8 "	2-2½	"	"	
700		190	4 "	2-2½	"	"	Hardness, high gloss, high melting point, uniform, pure.
1035		195	2 "	2-2½	"	"	
JET BLACK	SYNTHETIC	185	11-16	black	"	"	Blackness, economy.
ESTAWAX 20		210	2 max.	3 max.	"	"	Tougher, more flexible, higher melting point than carnauba. Excelleht gel-forming characteristics.
ESTAWAX 25		210	2 "	3 "	"	"	

PETROLITE CORPORATION

WAX DIVISION

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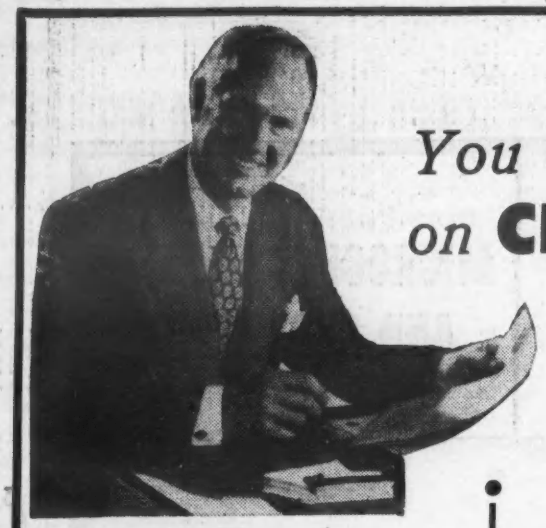
Petrolite waxes are stocked at, and available for shipment from Jersey City, N.J., Chicago, Ill., Kilgore, Texas, and Los Angeles, California.

PW 54-690A



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		1953	1954
Tartar, emetic, tech., gran. or powd., bbls., kgs	lb.	.56	.56
USP, powd., bbls., dms., kgs.	lb.	.61	.61
Terpin hydrate, com'l, bbls., c.l.	lb.	.24½	.24½
NF, cryst., fib. dms	lb.	.70	.57½
powd., fib. dms	lb.	.75	.65
Terpineol, com'l, dms., c.l., South.	lb.	.13½	.13½
extra, dms.	lb.	.48	.41
prime, dms.	lb.	.39	.30
Terpinglycol ether, tanks, works.	lb.	.22	.22
Terpinyl acetate, extra, cns., dms.	lb.	.55	.55
prime, cns., dms	lb.	.55	.55
Propionate, dms.	lb.	1.75	1.75
Testosterone, USP, 100 gms., bots	gm.	1.90	.79
Propionate, USP, 100 gms., bots.	gh.	1.90	.79
Tetrachloroethane, dms., works.	lb.	.12½	.14½
Tetrachloroethylene, USP, 55-gal. dms., works	lb.	.20½	.20½
Tetraethyl orthosilicate, dms., works	lb.	.71	.71
Pyrophosphate, 40%, cns., dms., dlvd.	lb.	.74	.69
Tetraethylenepentamine, tanks, dlvd. E.	lb.	.56	.57½
Thalium metal, dlvd	lb.	12.50	10.50
Sulphate, 99%, bots., dlvd.	lb.	10.50	12.50
Theobromine, fib. dms	lb.	3.75	3.00
Salicylate, fib. dms	lb.	3.80	4.00
Sodio salicylate, fib. dms.	lb.	3.10	2.90
Theophylline, anhydrous or USP, 100-lb. dms	lb.	4.40	3.15
Thiamine hydrochloride, USP, regular or ampul-type, fib. dms.	kilo.	135.00	135.00
Mononitrate, USP, fib. dms.	kilo.	135.00	135.00
Thiocarbanalide, dms.	lb.	.44	.50
Thiophene, dms., c.l., works.	lb.	1.99¾	NS
Thiourea, tech., dms., c.l., works.	lb.	.43½	.40
Thorium nitrate, purified, fib. dms., works	lb.	3.50	3.50
Threonine, dextro-laevo, bots., 1-kilo lots.	kilo.	600.00	600.00
Thyme, French, bgs	lb.	.22	.21
Spanish, bls.	lb.	.11	.10
Thymol, fib. dms	lb.	3.25	3.00
Tin, chloride (stannous), annyd., dms., works	lb.	9.35	8.34
Crystals, hydrous, bgs., bbls., works.	lb.	.80¾	.80½
Metal	lb.	1.21½	.85½
Oxide, bbls.	lb.	1.22	.87
Sulphate, stannous, bbls	lb.	1.09	.883
Tetrachloride, anhyd., dms., works.	lb.	.82	.89
Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd.	lb.	.21	.22½
ceramic, bgs., c.l., dlvd.	lb.	.21	.22½
regular, bgs., c.l., dlvd.	lb.	.21	.22½
metallurgical, natural, granular, bgs., c.l., works	ton.	110.00	120.00
rutile, non-chalking, bgs., c.l., dlvd. E.	lb.	.23	.24½
Hydride, cns., works	lb.	7.95	7.95
Pigment, calcium-rutile base, bgs., c.l., dlvd	lb.	.08	.08
Tetrachloride, technical, tank-cars, works.	lb.	.45½	.44½
Tolidin base, dist., kgs	lb.	1.30	1.30
Tolu balsam, cns., dms	lb.	3.75	3.00
Toluol, coaltar, industrial and nitration, tanks, works— Bethlehem, Pa.	gal.	.32	.34
Birmingham dist	gal.	.30	.32
Chicago district	gal.	.33	.35
Cleveland district.	gal.	.32¾	.34½
Geneva, Utah	gal.	.26	.26
Johnstown, Pa.	gal.	.30	.32
Lackawanna, N.Y.	gal.	.33	.35
Lone Star, Tex.	gal.	.35	.35
Lorain, Ohio	gal.	.31	.33
Minnequa, Colo.	gal.	.32	.32
Philadelphia, Pa	gal.	.33½	.33
Pittsburgh district.	gal.	.30	.32
Sparrows Point, Md.	gal.	.32	.34
Terre Haute, Ind	gal.	.33½	.35
Wyandotte, Mich	gal.	.34¼	.34½
Youngstown, Ohio.	gal.	.30½	.32½
Petroleum, industrial, 2°, tanks, works, Albany, N. Y.	gal.	.33	.35
Bayonne, N. J.	gal.	.33	.35
Baytown, Tex.	gal.	.31	.33
Chicago Ill.	gal.	.33	.35
Detroit, Mich.	gal.	.33	.35
Philadelphia, Pa	gal.	.33	.35
Providence, R. I.	gal.	.33	.35
Wood River, Ill	gal.	.33	.35
Tonka beans, Angostura, cks.	lb.	1.75	1.65
Brazilian, Surinam, cs	lb.	1.10	1.00
Totaquine, 100-oz. lots, cns.	oz.	.42	.42
Toxaphene, dms., c.l., works.	lb.	.17	.17
Triacetin, tanks, dlvd. E. of Rockies.	lb.	.43¾	.37
Tributyl citrate, tech., tanks.	lb.	.40½	.40½
Phosphate, tanks, c.l., frt. alld.	lb.	.51¾	.52
Tributylamine, tanks, c.l., works.	lb.	.72	.74
Trichlorbenzene, tanks, frt. alld.	lb.	.11	.13
Trichloroethane, tanks, works	lb.	.11½	.11½
Trichloroethylene, tanks, c.l., dlvd. E	lb.	.11	.10¼
Tricholine citrate, 65%, solut., cbys., works, frt. adjusted.	lb.	1.40	1.40
Tricresyl phosphate, coaltar, tanks, dlvd.	lb.	.35	.33
petroleum, tanks, dlvd	lb.	.35	.33
Triethanolamine, tanks, dlvd. E.	lb.	.24½	.24½
Triethylamine, tanks, frt. alld.	lb.	.43¾	.45
Triethyl phosphate, tanks, works.	lb.	.37	.37
Triethyleneglycol, tanks, dlvd. E. of Rockies.	lb.	.21½	.21½
Triethylenetetramine, tanks, dlvd. E	lb.	.47	.47
Trimethylamine, 25-40%, tanks, works, basis 100%, frt. equald.	lb.	.33	.33
Tripentaerythritol, bgs., l.c.l., works.	lb.	.39½	.37
Triphenyl phosphate, bbls., c.l., frt. equald.	lb.	.37	.37
Triphenylguanidine, bbls., works.	lb.	.90	.90
Tripoli, air-floated, bgs., c.l., works	lb.	.0175	.02
double-grd., bgs., c.l., works.	lb.	.016	.0185
single-grd., bgs., c.l., works.	lb.	.015	.0175
Tripropyleneglycol, tanks, frt. alld	lb.	.24½	.24½
Trypsin, pharmaceutical, 1:80, dms., works.	lb.	5.00	5.00
Tryptophane, dextro-laevo, fib. ctns., works.	kilo.	165.00	165.00
Tungsten metal, powd., 99.9%, dms., works.	lb.	7.75	6.21
Tyrothricin, USP, bots.	gram.	1.00	.75

U

		1953	1954
Urethane, USP, dms.	lb.	1.50	1.50
Urea, dom., 46% N, kgs., bgs., c.l., works	lb.	.05½	.06
45% N, bgs., c.l., 30 tons, frt. alld. Kans., Neb., N. Dak., Okla., S. Dak., Tex. and East.	ton.	142.00	154.00
Urea-ammonia liquor, A and B grades, N. basis, Belle, W. Va.	ton.	120.00	128.00
C grades, tankcars, same basis.	ton.	118.50	126.50
37 grade, tankcars, same basis.	ton.	147.50	155.50
Uva ursi leaves, bls.	lb.	.12	.12

V

Valerian root, Belgian, NF, bls.	lb.	.40	.38
Valine, dextro-laevo, dms., works.	lb.	21.00	21.00
Valonia beards, 40-42% tannin, bgs., ex-dock.	ton.	85.00	75.00
Cups, 28-30% tannin, bgs., ex-dock	ton.	64.00	56.00
Extract, powd., bgs., ex-dock, duty extra	lb.	.09½	.09½
Vanadium pentoxide, CP, bgs., cns., contract, works.	lb.	7.00	7.00
tech., dms., works	lb.	1.00	1.28
Vanilla beans, Bourbon, tins	lb.	4.25	7.25
Mexican, cuts, tins	lb.	3.50	7.25N
whole, tins	lb.	4.00	7.50
Tahiti, cs.	lb.	3.00N	6.75N
Vanillin, ex eugenol, tins, 25 lbs.	lb.	6.75	6.50
ex guaiacol, tins, 25 lbs.	lb.	3.00	3.00
ex lignin tins, 25 lbs	lb.	3.00	3.00
Vinyl acetate, tanks, works	lb.	.19¾	.15¼
Butylether, normal, tech., tanks, works	lb.	.27	.27
Ethylether, tech., tanks, works.	lb.	.27	.27
Isobutylether, tech., tanks, works.	lb.	.27	.27
Methylether, tanks, works.	lb.	.27	.27
Pyridin, ret. dms., works.	lb.	1.65	1.65
Viosterol, in alcohol, 1,000,000 D units per gm., bots., 10 billion USP units. 1,000,000 units.		.025	.025
in natural vegetable oil, 400,000 to 1,000,000 D units per gm., bots., lots of 1 billion USP units. 1,000,000 units.		.025	.02
Vitamin A, synthetic, acetate, cryst., oeads, 500,000 A units per gm. 1,000,000 units.		.17	.07¼
liquid, in oil, 1,000,000 A units per gm. 1,000,000 units.		.15	.12
Palmitate, liquid, 1,000,000-1,800,000 units per gm. 1,000,000 units.		.15	.12
in oil, 1,000,000 A units per gm. 1,000,000 units.		.15	.12
B_{12} crystalline, gm. or 5 gm. vials.	gram.	295.00	295.00
oral grade, solids, in containers of 1 and 5 gms. of B_{12} activity.	gm.	225.00	225.00
K_1, 25 gm. bots.	gm.	4.50	4.50

W

Wahoo, root bark, bls.	lb.	1.95	2.30N
Warfarin, 0.5 percent, dms., 50-lb. lots, f.o.b., N. Y. or Chicago	lb.	1.93	1.93
Wattle bark, fair average, or e. Afr., bgs., ex dock.	ton.	104.00	100.00
merchantable, bgs., ex dock.	ton.	100.00	96.50
extract, liquid, 35% tannin, tanks, works.	lb.	.10¾	.09¾
solid, E. Afr., 60% tannin, ex dock, duty extra	lb.	.11	.10
S. Afr., 60% tannin, ex dock, duty extra.	lb.	.11½	.10
Wax, bayberry, bgs.	lb.	.55N	.42N
Bees, crude, African, bgs.	lb.	.46	.51
Brazilian, bgs.	lb.	.70N	NS
Central American	lb.	.54	.54
refined, bleached, white, bricks.	lb.	.69	.68
slabs	lb.	.67	.67
yellow, bricks	lb.	.56	.58
slabs	lb.	.55	.57
Candelilla, crude, bgs	lb.	.75	.73
refined, bgs.	lb.	.77	.75
Carnauba, chalky, bgs., ton lots.	lb.	NS	.84N
North Country, No. 2, ton lots.	lb.	NS	.93N
No. 3, bgs., ton lots.	lb.	.98	.86
refined, bgs., ton lots	lb.	1.03	.88
yellow, No. 1, Ceara, bgs., ton lots.	lb.	1.28	1.19
No. 2, Ceara, bgs., ton lots.	lb.	1.26	1.17
Esparto, African	lb.	.80	.70
Japan, bgs.	lb.	.23	.24
Microcrystalline, 170-175° m.p., ASTM, penetration 15-20, amber, ctns., 20,000 lbs., group 3, works	lb.	.13	.13
black, ctns., 20,000 lbs., same basis	lb.	.11½	.11½
white, ctns., 20,000 lbs., same basis.	lb.	.24	.24
180-185° m.p., ASTM, penetration 7-11, amber, ctns., 20,000 lbs.	lb.	.16	.16
black, ctns., 20,000 lbs.	lb.	.14¼	.14¼
white, ctns., 20,000 lbs.	lb.	.27	.27
190°-195° m.p., ASTM, penetration 2-7, amber, ctns., 20,000 lbs., same basis.	lb.	.20½	.20
black, ctns., 20,000 lbs., same basis	lb.	.19	.18
white, ctns., 20,000 lbs., same basis	lb.	.33½	.33½
Montan, dom., refined, bgs.	lb.	.31	.31
German, crude, bgs	lb.	.12½	.12
Ouricury, refined, bgs	lb.	.71	.80
Sugar cane, ref., dom., works.	lb.	.75	.75
Spermaceti, blocks, cs	lb.	.26	.25½
cake, cs	lb.	.27	.26½
White pine bark, rossed, bls.	lb.	.17	.20
White precipitate, USP, powd., dms.	lb.	5.00	5.00
Whiting (see Calcium Carbonate).			
Wild cherry bark, thin, natural, bls.	lb.	.17	.15
rossed, bls.	lb.	.19	.19
Witch hazel leaves, bls.	lb.	.19	.21

—*Continued on page* 43

Heavy Chemicals

—Continued from page 3

mand stemming from glass plants. Labor strikes at several rayon mills had a tightening effect on by-products output of glauber's salt and sodium sulphate. Sodium antimoniate declined to 27½c. per pound. Lead closed the month at 14c. and prime western zinc at 12c., while nickel advanced 3½c. to 60c. per pound.

Tin Restrictions Come Off

All restrictions on the use of tin were removed in February. Fluorspar was also decontrolled while expectations of the removal of government regulations for copper brought out an active demand for copper sulphate. The late advance in nickel was reflected in prices of nickel salts, nickel sulphate advancing ¾c. to 27c. per pound. There was no easement in the short supply of glauber's salt as the strike at Nitro, one of the chief supply sources, was still unsettled. A substantial increase in demand for potassium carbonate was noted, accompanied by reports that glass-plants held sizable orders for television tubes. The trend of quicksilver was downward, sales being reported at $206 per flask late in the month. Caustic soda sales increased under an improved demand from cord and yarn mills.

Fluorspar prices were lifted to a higher level in March. Dicalcium phosphate assumed a highly competitive position and prices dropped sharply. Producers quoted $80 per ton for the feed grade but had to accept $75 in many instances to get the business. Price controls were lifted March 12 by OPS on all chemicals except sulphur, sulphuric acid, oleum, sulphur trioxide and beryllium oxide. Copper chloride was advanced to 27½c. per pound. Nickel salts scored another price advance and all chemicals based with fluorspar were listed higher including hydrofluoric acid and the fluorides. Quicksilver declined to $195 per flask but recovered to $203 on government buying. Both fused and flaked sodium sulphite were advanced in price. A major producer announced price advances in chlorine and soda ash effective May 1. Some producers advanced the price of sodium sulphydrate and others followed through.

Anhydrous Ammonia Advances

Anhydrous ammonia advanced to $82 per ton in April. Barium chemicals also recorded advances. Sodium carbonate monohydrated was lifted 25c. per 100 pounds. Tin metal prices dropped severely followed by a total collapse in the tin market. The weakness was reflected in all the tin based chemicals. Quicksilver dropped to $195 per flask and lead declined to 12½c. An advance in oxalic acid established the market at 16½c. per pound. Demand for copper sulphate fell off owing to the uncertainty surrounding the metal but a general increase was noted in sales for most heavy chemicals. Increased production of potassium carbonate reached the market. A temporary breakdown at a major sulphuric acid plant tightened the supply a bit. Copper sulphate crystals were reduced to 10.35c. per pound for carlots. Tin metal touched 92½c. a pound late in the month and recovered to 96c.

May started the parade of higher prices. Lifting of price controls gave producers an opportunity to cover accumulated higher manufacturing costs including freights, labor and materials. The advance in soda ash on May 1 was followed by a slower demand. Phosphoric acid was lifted 20c. per 100 pounds and there was an industry wide advance in prices of sodium phosphates. Copper chloride was priced higher. Announcements were made of advances in hydrochloric, nitric and sulphuric acids effective June 15 on spot and July 1 on contract. The absence of demand for insecticide use brought chlorine into freer supply and there was plenty of caustic soda available also. Aluminum sulphate prices were advanced 20c. per 100 pounds. Chromic acid, sodium bisulphite, sodium hyposulphite, salt cake, strontium nitrate and zinc sulphate crystals were established at higher selling levels. Copper metal declined to 29½c. per pound where it remained for the balance of the year, with one exception. Tin chemicals moved both up and down following closely the fluctuations of the metal.

More price advances were announced in June to be effective July 1. These announcements naturally stimulated consumer buying and an abundance of orders were turned loose in order to beat the deadline. White granular sal ammoniac and ammonium bicarbonate were priced higher for spot shipment. Sulphur chloride, zinc chloride crystals and fused were lifted in price. Dry caustic soda, and chlorine were tagged for an advance July 1 and so were caustic potash, potassium carbonate and the chlorates. Anhydrous ammonia was slated for a spread of $85 to $88 per ton in tanks, according to location at the turn of the month and aqua ammonia was listed at $96. Tin metal continued weak throughout the month and dropped to 92c. per pound, carrying down prices of all tin based chemicals.

Buying spree subsided by the first of July. Heavy shipments continued to be made against June orders but demand for additional quantities for most chemicals was definitely off. Hot dry weather brought out some fair sales of calcium chloride for dust control on highways. Anhydrous ammonia tightened appreciably under heavy government withdrawals. Closing down of many glass plants for a vacation period curtailed demand for potassium carbonate and sales of caustic potash were off on account of consumer buying during the preceding month. Aluminum metal was advanced, showing ingots at 21½c. per pound and pigs at 20c. The tin market remained weak with sales down to 78¼c. per pound and all tin based chemicals were lower in proportion. Quicksilver sold at $190 per flask on spot. Bleaching powder was taken freely by the government but there were still stocks for civilian use. There was no urgent demand for chlorine and indications pointed to a freer spot supply. Cobalt was reduced in price without affecting quotations for cobalt chemicals.

Free Trading in Copper

Free trading in copper was resumed in August on the London Metal Exchange after a lapse of 14 years. Heavy offerings broke London prices but there was no serious reflection in the American market with prices for electrolytic at 28½c. to 29c. per pound delivered. Calcium chloride demand fell off. There was some pickup in demand for heavy chemicals but no desire to extend commitments beyond the limit of current wants. Carbon tetrachloride was kept active by the demand for freon. Nickel salts continued in exceedingly tight supply with no easement in sight. Spot stocks of caustic soda, chlorine and soda ash increased. Acrylonitrile prices were reduced 7c. per pound to 36c. per pound in tanks. Hydrogen chloride was advanced to 45c., an increase of 4½c. in the carlot price. Announcement was made of an advance in the price of calcium chloride effective September 1. Tin metal recovered part of its early loss and sold at 83c. per pound with the tin based chemicals advancing accordingly.

Calcium chloride was advanced in price on September establishing the market at $27 per ton for flakes, $11.50 for liquor in tankcars and $37.15 per ton for powdered works, freight equalized. Calcium hypochlorite was listed higher. Lead declined to 13½c. per pound New York and 13.30c. at St. Louis. Zinc stocks increased under a slow demand and the price of prime western was reduced to 10c. per pound East St. Louis. A threatened dock strike in New York brought out enough scare buying of tin to advance the price from 82c. to 83½c. Quicksilver sales were reported at $184 per flask on spot. The overall supply situation was favorable with the tight spot confined to nickel salts. There were indications of improvement in the availability of anhydrous ammonia for spot shipment.

October Heavy Chemical Sales

Heavy chemical sales averaged good in October. The dock strike proved shortlived and had no serious affect. The State Department entered into negotiations with the Chilean government regarding the disposal of Chile's surplus copper, while the American market advanced to 29½c. per pound for electrolytic. A major producer of alkalies announced contract prices for 1954 at prevailing levels. Increased spot stocks eliminated chlorine as a buyers' problem. There was appreciable easement in the supply of anhydrous ammonia. Consumers of dry caustic soda were still using inventories purchased prior to the

Trend of Heavy Chemical Prices
100=1949 Average

	1953 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	95.96	95.62	95.44	97.51	97.59	97.63	98.36	98.35	98.34	98.26	98.29	98.43
L.	95.84	95.44	94.86	97.22	97.27	97.58	98.35	98.28	98.27	98.27	98.22	98.28

	1952 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	97.92	97.69	97.69	97.69	97.69	97.68	95.86	94.78	95.13	95.13	95.44	95.89
L.	97.69	97.69	97.69	97.69	97.69	95.86	94.84	94.77	94.77	95.13	95.13	95.62

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recent advance. Tin declined to 79c. per pound on spot and recovered to 81c.. Cobalt metal advanced from $2.40 to $2.60 per pound which strengthened the background of all the cobalt chemicals. Potassium stannate shipments were temporarily delayed by difficulty at a major producing plant but returned to normal at the close of the month.

Calcium chloride experienced a strong demand in November. States took on substantial quantities for highway ice control. Removal of government control on nickel salts had no easing influence on the tight supply and producers resorted to the policy of allocating stocks to regular customers. Production of electrolytic caustic soda was cutback in an attempt to check the overflow of chlorine. Phosphates were in heavy demand and there was a steady movement in both light and dense soda ash. Production of sulphuric acid seemed to be topping demand. A strike at an important chemical plant was called on November 8. The plant was located at Cartaret, New Jersey. Announcement was made that new nickel sulphate production would reach the market shortly after the turn of the year.

Antimony Metal Declines

Chemical sales averaged good during the first half of December. Later in the month, buyers became inventory conscious and the sales volume declined. Antimony metal dropped 6c. a pound to 28½c. The tin market moved irregularly downward with tin salts declining all around. Greece came into the market for 4,000 tons of copper sulphate but failed to place any business with American producers owing to lower prices named by Great Britain and Italy. Cobalt chemicals advanced as a reflection of the late uplift in metal prices. There was no scarcity of chlorine or sulphuric acid. Strike at the Cartaret chemical plant ended December 21 after a shutdown of 43 days. It was stated that no alkali plant was running at capacity at the close of the year. Quicksilver recorded an advance to $188 for flask on spot due to a scarcity of available material.

Agricultural Chemicals

The year 1953 opened quietly all along the line for agricultural chemicals. Major producers had booked a sizable contract tonnage in ammonium sulphate, potassium muriate and superphosphate for 1953-1954 shipment but mixers were in no hurry to take on withdrawals as their bins were overloaded with finished fertilizer. Farmers faced with lower incomes and realizing there were no serious shortages in sight, were not inclined to tie up money in investment inventories. The disposition was to adopt the pre-war policy of buying fertilizer when needed and letting the producer carry the basket. Plugged at the consuming source, mixers' stocks kept increasing and the basic crude materials were backing up at the plants of producers. Heavy carryover stocks of many insecticides from the preceding year kept those markets under pressure with the price slant downward. The spring movement of fertilizer materials was late in getting started. Weather conditions throughout the country were decidedly unfavorable for planting operations. It was well on into April before the real demand developed. From then on until June, shipments gained momentum but there were no bottlenecks and no difficulties regarding supplies. Ammonium nitrate was the only tight spot and producers asserted they could have sold more if they had the stock to deliver. The peak demand was reached in June. The drought with all its disastrous influences including intense heat started in July. The drought was no short-lived affair. Sections of Texas, Oklahoma, Nebraska, Kansas and most of Missouri were burned powder-dry by weeks of hot sun and no rain. In many areas pastures were ruined and crops cut in half. Ranchers with large herds were forced ot use commercial feeds instead of range grass and some had to market their stocks at disaster prices.

Weather and Insecticides

Weather conditions also played havoc with the movement of insecticides. Prices for DDT, lindane, BHC, aldrin and dieldrin were reduced. Cotton-dust was under severe pressure and for a time, the market was demoralized. Hot dry weather worked against a large boll-weevil infestation and by the middle of the summer, it was apparent that the movement of insecticides would not be favorable. The advent of the fall months found the fertilizer market lapsed with the same condition that prevailed over the opening months of the year. Stocks of ammonium sulphate, potash, superphosphate and triple superphosphate began to back up. The government made large purchases of ammonium sulphate for Korea without causing more than a temporary ripple on the surface of the market. Heavy stocks of foreign sulphate in storage along the Atlantic coast forced a reduction in the price of domestic material at the port but there was no scarcity of ammonium sulphate or any other basic fertilizer chemical at the close of 1953.

Activity in agricultural chemicals was unusually slow at the beginning of 1953. January found warehouses glutted with mixed fertilizer awaiting shipment. This condition was visibly reflected in the demand for ammonium sulphate, potassium muriate and superphosphate. There were heavy offerings of foreign ammonium sulphate at $50 per ton, Atlantic and Gulf ports with sales recorded down to $47. The synthetic insecticides were also experiencing a slump.

At the beginning of February, there was no general improvement in demand. Ammonium nitrate was the only tight spot in the big basic fertilizer chemicals. There was plenty of ammonium sulphate available and also superphosphate while mixers were concerned over the late movement to farms. By the middle of the month the first real increase started in potassium muriate (domestic) and the spring call for sodium nitrate began. Shipments of superphosphate gained slightly and producers were encouraged because the trend of shipments was toward expansion. Heavy demand for ammonium nitrate exceeded output and shipments could not be brought up to schedule.

Removal of price control occasioned an advance in the price of phosphate rock in March. Domestic potash shipments increased and gradual improvement took place in the movement of superphosphate. There was plenty of foreign ammonium sulphate offered at $47 per ton Gulf and Atlantic ports. Coke-oven ammonium sulphate was in better demand and, while general improvement was reflected in the movement of basic fertilizer chemicals, tonnage shipments were not up to producers' expectations.

Spring Demand Takes Hold

By April, the spring demand had really taken hold of potassium muriate and contract withdrawals of domestic material were exceedingly heavy. Two major producers announced contract prices as unchanged for 1953-54. Ammonium sulphate movement gained substantially and at the close of the first week the entire production of coke-oven sulphate was sold for the month of April. Superphosphate shipments also gained but not to the same extent as potash and ammonium sulphate. The supply of ammonium nitrate became tighter with producers falling further behind on shipments.

Domestic steamed bone meal declined $5 per ton to $65 early in May. Shipments of coke-oven sulphate continued heavy enough to hold the supply position tight, although there was plenty of foreign sulphate (synthetic) in storage at Atlantic ports. The government came up with an order for 120,000 tons of ammonium sulphate for Korea and this had a temporary tightening effect on the market. Nitrogenous process tankage felt the influence of foreign competition and a wavering of prices for castor pomace.

In June BHC was offered at 0.85c. per gamma unit with hardly enough demand to test the market. DDT was available at 23c. per pound. Castor pomace declined $2.25 per ton to $35. Menhaden meal opened the season at $135 per ton and scrap at $130 with practically all the Baltimore plants in operation. Most of the domestic potash output had been sold for the coming year and producers stated that first quarter shipments of muriate were the largest on record. Announcement was made that normal superphosphate would advance to 88c. to 91c. per unit of a-p-a on July 1 and triple would also be lifted to 98c., East Tampa, Florida. Yokohama

Trend of Agricultural Chemical Prices

100=1949 Average

1953

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	113.04	112.73	112.56	112.09	111.61	111.58	112.37	112.04	112.03	111.51	111.50	111.25
L.	112.75	112.56	112.12	111.99	111.55	111.09	112.08	111.94	111.51	111.38	111.33	111.23

1952

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	113.31	113.31	113.31	113.31	114.17	114.17	114.21	113.66	113.63	113.57	113.53	113.70
L.	113.31	113.31	113.31	113.31	114.17	114.17	113.90	113.52	113.53	113.56	113.53	113.08

purchased 50,000 tons of phosphate rock. Castor pomace prices were again reduced late in the month, establishing the market at $32 per ton, and nitrogenous process tankage declined to $3.75 per unit of ammonia.

It looked as though the peak demand had been reached for most of the basic fertilizer chemicals in July. Lack of rain had a curtailing effect on demand in many areas, while floods in others ruined growing crops. The movement of insecticides was light with very little important infestation in sight.

Continued hot dry weather throughout the month of September seriously affected the movement of all agricultural chemicals including insecticides.

Storage Facilities Crowded

Tonnage shipments of most fertilizer chemicals continued decidedly off in October. The backup of ammonium sulphate taxed the capacity of storage facilities and potash and superphosphate stocks crowded plant warehouses.

Castor pomace took its final drop in November with sales at $25 per ton, bagged at the works. General rains ended the drought but came too late for fall planting. Ammonium sulphate and potash continued to pile up and there was no scarcity of normal or triple superphosphate.

Fertilizer Shipments Pick Up

December occasioned the first pickup in demand for the basic fertilizer chemicals for several months. The improvement was not very pronounced, but at least the trend was toward increased shipments. Out of the 140,000 metric tons of ammonium sulphate for export required in the preceding month, only 20,000 tons were placed in the US. Another order came through in December for 208,000 long tons and the result will not be known until January. Japan has been a keen competitor in several of these government bids. Defluorinated phosphate rock was cut $2 per ton and pyrethrum prices were down sharply, both items being subjected to a keen state of competition. Parathion prices were advanced 12c. per pound to cover increased producing costs. Packinghouse byproducts were stronger under an improved demand, dried blood, hoof meal and tankage recording price advances.

Drugs and Fine Chemicals

—Continued from page 3

and the whole setup was ordered to be disposed of to private interests.

It was considered very doubtful that there would ever be future use for the alcohol butadiene plants since expansion of petrochemical facilities was reported to have been sufficient to take care of butadiene needs of the synthetic rubber program. A yearend report placed the needs of the military for synthetic rubber at about 10 percent of the total output over the past year.

The third quarter saw alcohol consumption down from levels earlier in the year, although the easing in demand was primarily the result of the usual seasonal decline in industrial operations. Alcohol prices began to be shaded somewhat by the fourth quarter and the industry went along with a 5c. per gallon cut in November, shortly after the opening of synthetic alcohol production facilities which were expected to boost synthetic capacity by 125,000 gallons per day of 192 proof alcohol.

The annual report issued late last year by the Department of Agriculture emphasized the shrinking market potential for fermentation alcohol made from molasses as compared to that synthetically produced. It was estimated that capacity of synthetic alcohol plants had approached 230,000,000 gallons per year, while total utilization of alcohol in 1953 was expected to reach about 265,000,000 gallons. Of the alcohol used last year, RFC purchased some 40,000,000 gallons for use in its butadiene plants. This was roughly 15 percent of the total consumption, it was noted. Thus it could readily be seen that assuming the chemical industry uses as much in 1954 as it did in 1953, the synthetic alcohol industry would be in a position to produce some 230,000,000 gallons, if necessary. The future of fermentation alcohol hinges on blackstrap molasses prices.

Molasses Price Movements

While molasses producers have been endeavoring to break away from their dependence upon fermentation alcohol producers for sale of a substantial part of the annual blackstrap yield, conditions, in other consuming quarters, have been unfavorable. Molasses prices at the year's end were about on a par with those at its incep-

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tion. Blackstrap prices at New Orleans have held at about 10c. per gallon for most of the past year. Looking back another year, prices on this commodity had declined about 19c. through 1952 to 10c. per gallon. Whether blackstrap prices will decline or advance remained a matter for conjecture in view of the state of the market throughout most of 1953.

With synthetic alcohol standing ready to fill any gaps left in the alcohol supply picture by the withdrawal of fermentation producers from the scene, some trade observers see excellent prospects for divorcing the molasses market and molasses prices from the effects of conditions in the alcohol market. It was estimated that cattle feed usages as well as the production of yeast, citric acid, vinegar and other items would account for some 400,000,000 gallons of the estimated 475,000,000 gallon yield last year. Attention was being directed at pushing up consumption of blackstrap in stock feeds as a means of wiping out most of the surplus remaining.

German, Italian Competition

Added to the woes of oversupply in many chemicals, the stepped up activity of western Germany and Italy in chemical manufacture saw domestic producers hard-pressed to compete with lower-priced imports, particularly in the drug field. While the impact of western Germany's rising dyestuff and pharmaceutical production had already been felt in a number of areas, notably in Europe and South America as well as this country, German antibotics had not as yet presented a challenge to American producers. The possibility of this occurrence was considered to be very real, according to some sources, and a sales battle was reportedly shaping up on the Continent and in South America for this business.

Italy also has emerged as a competitor to manufacturers of certain drugs in this country. Offerings of lower priced cream of tartar as well as tartaric acid by importers here continued to be a thorn in the side of domestic manufacturers of these items. Nevertheless, domestic producers reported that last year was, on the whole, fair, despite the ready availability of the lower priced imported material. Some trade quarters here claimed that they had not lost much business in competition with Spanish and Italian material since their customers weighed the higher cost of the domestic against quality and an assurance of reliable supply of the latter.

Other items offered from abroad during the year at lower than domestic prices were folic acid, sex hormones and a range of vitamins such as ascorbic acid, several B vitamins and fishliver oils. Cortisone and other hormones have been offered at prices below those quoted by domestic producers. Most pharmaceutical items imported come in under the coal tar medicinals classification of the tariff act and bear a duty of 3½c. per pound plus a 25 percent advalorem duty based upon the selling prices of competitive American made articles. Domestic producers, realizing that foreign values are often well below domestic prices, have been trying to have tariff barriers reinforced.

Cost advantage enjoyed by foreign producers becomes more evident when it is considered that low foreign wages, which are one-fourth to one-third of those in domestic industry, contribute to low overhead costs and thus lower production costs. In the past, an offering of lower priced imported material in an amount which might constitute only 5-10 percent of the domestic market, has been enough to break the price line on the domestic material.

Crude Iodine Situation

Crude iodine underwent a drastic price reduction last June. For several months prior, Japanese crude iodine was being sold at prices below that of domestic and Chilean crudes. The price of the Chilean material was slashed 54c. per pound, taking the market by surprise, for the most part. This reduction was promptly met by the sole domestic producer, while for the next few weeks Japanese producers pondered whether they would continue to compete at the newly reduced level. Ultimately, Japanese material came in at the new price and hovered slightly under this level for the balance of the year.

Caffeine, aminophylline and theophylline prices were reduced last year for the second year in a row in an effort to bring domestic schedules somewhat into consonance with imported prices. Consumption of domestic caffeine was at fairly good levels last year, in view of the stiff price competition given by the imported. Some quarters here maintained the reason that domestic caffeine was able to overcome the price advantage to the imported was that the quality was higher. Specifically mentioned were absence of odor and color. Aminophylline and theophylline, however, did not do as well in this respect. There were two price cuts in these compounds last year, with both ascribed to the competition of lower priced imports.

Lanolin consumption in 1953 was at fair levels on the whole. Up until about May, supplies were short since price ceilings were in effect. The manufacturers of lanolin had been handicapped since June of 1952 when ceiling prices were placed on lanolin. As a result, lanolin producers were unable, in many cases, to pay the high prices asked for wool grease, both here and abroad, which resulted in the limited supply situation. In addition to these factors was the slump in wool scouring, the process of which crude wool grease is a byproduct. The decline in wool production was more or less widespread, both here and abroad, and was a pertinent limiting factor keeping lanolin supplies short.

With the lifting of price ceilings in April, lanolin prices were upped sufficiently to enable processors to buy additional quantities of wool grease abroad. In a matter of approximately two months, supply and demand moved into balance. By midsummer prices were cut back as consumer resistance stiffened. The balance of the year saw adequate supplies and consumption about on fair levels.

Chlorophyll Balloon Bursts

Chlorophyll presented a sad picture last year. Consumption by the year's end had dropped to a low level and was destined to remain far below the peak levels reached in 1952. As a result of tremendous plant expansion, chlorophyll producers stood ready to meet the heralded growth in consumption. It never came. Although possessing a limited effect upon body odors, mouth odors, and the like, unrestricted ballyhoo on the part of advertisers proved misleading with a resulting disenchantment of this product in the public's eye. The fall from favor came quite rapidly and a considerable portion of new plant capacity never reached commercial production stages. The year ended with consumption at a low ebb.

Demand was reportedly restricted mainly to a few large consumers and included chewing gum and dog food manufacturers. Prices declined further during the year although there was no severe competition among manufacturers still in production since it was felt that no additional business would be gained by such tactics. Chlorophyll, of course, was far from being written off as just a flash in the pan. As in the case of the anti-hista-

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mines, further research was expected to turn up more stable and useful applications than were used during its promotion period.

Isoniazid Market Picture

Isoniazid was another example of over promotion of a drug in the lay press. While effective in the treatment of certain stages of tuberculosis and other related diseases, a clamor was raised in the lay press and pseudo-scientific publications that tuberculosis would become virtually non-existent once production of isoniazid caught up with the growing demand. By 1953, supplies were about caught up with the demand, which, instead of increasing, actually did an about face. Further clinical study uncovered the shortcomings of isoniazid in tuberculosis treatment and consumption fell off to a small but regular volume.

Producers were hopeful that clinical studies then under way would turn up additional fields of application for isoniazid, but as of the year's end, nothing startling had been developed. Prices were s ashed several times on the bulk product last year although by yearend, prices were more or less stable since further price cuts were not considered economically wise and, more importantly, it was not thought that consumption would be affected thereby, one way or the other.

Antibiotics More Stable

The market in antibiotics was much more stable last year compared to 1952. Early in the year, prices on penicillin and streptomycin settled into a pattern which was basically unchanged throughout the balance of the year. The number of manufacturers producing antibiotics last year was considerably fewer than in 1952. The severe price competition in 1952 eliminated many of the smaller producers, leaving the field to a few old line producers. Late in 1953, one important fine chemical producer sold his antibiotic stocks and equipment, thus getting out of antibiotic production.

An interesting item concerning penicillin was reported last year when it was revealed that the day may not be too far distant when synthetic manufacture of penicillin will be accomplished. Each of the synthesis problems posed by the structure of natural penicillin has been solved individually. While a total synthesis of biologically active penicillin had not been obtained at that time, the feat had been accomplished in theory, it was said.

Production of glycerin from fats was steadier in 1953 than in some previous years. The decline due to replacement of soap by detergents was slowed in the latter half of 1953, and partly offset by use of higher grade fats for soap, from which more glycerin is released. Also, production of fatty acids and fatty alcohols, with glycerin as a coproduct, showed steady progress. Full-scale operation of synthetic glycerin facilities throughout the year also contributed more glycerin to meet continued market growth. Preliminary estimates of total 1953 domestic glycerin production (100 percent basis) were 220,000,000 pounds, about 17 percent above 1952. In addition, the highest level of net imports of glycerin in many years was indicated—approximately 30,000,000 pounds.

Glycerin Price Trends

Crude glycerin prices declined from 31c last January to 18c. at the yearend. Saponification grade went from 34c. to 20c during the same period. The decline in crude prices was reflected in sizable price drops in refined grades twice during the year. The first reduction, which took place in August, ranged from 3½c. to 5c. per pound. The second reduction, in September, drove prices down to 33c. on the 95 percent grade material. At that time, there was some long due adjustments in grade differentials.

During the last quarter of the year glycerin prices were truly competitive with pentaerythritol schedules for the first time since 1950. Growing competition between pentaerythritol and glycerin for a larger share of the protective coatings materials market became evident once prices were competitive. Demand for pentaterythritol was reported to have been at generally satisfactory levels last year. Supplies were ample and the increase in production due to the coming on stream of new plants this year was expected to intensify competition with other polyols.

Production of pentaerythritol hit its peak last June with a reported production of 5,100,000 pounds. Production subsequently fell off down to 4,200,000 pounds in October, the last month for which production figures were available. With additional facilities slated to come on stream in 1954, there appeared to be a likelihood that prices would be cut, it was said.

The major lacquer solvents held un-

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changed in price last year. One exception, however ,was isopropyl alcohol. Price schedules were advanced 3c. per gallon in April. This was the sole change in this item for the year. Butyl alcohol and acetate as well as ethyl, isopropyl and isobutyl acetates went unchanged in 1953. As a whole, the year proved to be a good one, consumption-wise. Supplies were ample and the coming on stream of additional synthetic butanol facilities served to swell existing supplies.

There was quite a flurry of price reductions among the glycols and related products in December. Ethylene, di-ethylene and propylene glycols were reduced as were ethylene dichloride, and ethylene and propylene oxides.

Botanical Drugs, Spices, Gums

Business volume in botanical drugs last year was generally reported to be about on par with that during 1952. Compared with other years, this amounted to a smaller tonnage than has been the average in prior years. The overall supply situation was worse than it was in 1952. Primary factors in the dwindling of supplies were delays in shipments, quality declines and below normal collections in domestic botanicals.

In this country, collection of native botanicals was far below normal. The cause mainly was a lack of labor, although prevailing drought conditions in collection areas for the second year in a row made it impossible to get any collection of certain botanical items, according to on-the-spot reports.

Early in the 1953 collection season—before the drought really got under way—conditions had been unfavorable. Arrivals at the collection depots had been small and shipments from the warehouses often exceeded receipts by a substantial margin. Inhabitants of mountain areas, who normally gather drugs, last year seemed indifferent to augmenting their income by working for collectors.

Highway Improvements Seen Factor

One collector attributed their indifference to highway improvements. He pointed out that all states in the botanical drug belt have had substantial road improvement programs during recent years. Better roads, he continued, has brought about an expansion in bus service, thus making the mountain country a close neighbor of industrial centers.

Industrial plants adjacent to botanical drug collection depots have sprung up at an amazing rate in the past few years, he noted, adding that this industrial expansion has created high-paying jobs for young mountain men and women. Even many older folk, who formerly depended heavily on drug collection for their cash money, have been attracted to the plants, he said.

Easy access to industrial plants over modern, hard-surface roads via a new network of bus lines caused a sharp drop in the number of drug gatherers last year, it was noted. To a dwindling labor supply was added the drought, one aspect of which may not have been readily apparent to consumers. Drug plants did not grow to normal maturity because of long dry periods. Normal ripening of plant life was impossible and, long before maturity, the above-ground botanicals had withered to a dry crisp. For two successive years, drought has upset the normal balance of nature and made serious inroads on the medicinal properties of plant life.

The price trend in buying was upward in the main in 1953. In early June, concern about contract obligations rose sharply and prices paid to gatherers were raised to stimulate collection.

To cover contract commitments, prices were advanced and scarcities caused transactions between collectors to rise sharply. Following is a composite list of the botanicals in greatest demand and the extent of price advances from June through October:—

Price Advances Noted

Aletris root	41%
Barberry root	25%
Blackberry root bark	46%
Black Haw, root bark	25%
Blood root	16%
Catnip leaves	25%
Cohosh root, black	33%
blue	16%
Elm bark, slippery	20%
Hellebore root	20%
Fringetree, root bark	33%
Helonias root	33%
Passion flower herb	28%
Pink root	9%
Sassafras, root bark	13%
Wahoo, root bark	50%
tree bark	100%
Wild cherry bark, thick, natural	33%
thick, rossed	11%

Reductions during the June-October period were fewer than advances, in sharp contrait to the generally rising trend. They were:—

Price Reductions Listed

Catnip herb	60%
Goldenseal root	16%
Pleurisy root	28%
Peppermint leaves	28%
Witch hazel bark	50%

Scarcity of some foreign botanical drugs was predominantly due to lack of skilled labor and the aforementioned delays in shipment and declines in quality. With virtually the entire world evolving into an armed camp, and the youth impressed into the armed services, a shortage of labor has developed for such employment as the collection of botanical drugs. In many countries, especially those behind the Iron Curtain, everyone, both young and old, is either in the armed services, producing food crops or working in industry. Also to be considered, was the fact that border areas in many countries were closed to all but military operations. The growing shortage of orris root, a botanical collected in the border area in northern Italy was a case in point. The tense situation over Trieste was reported to be a decisive factor in the curtailed gathering of the root, with a shortage developing late in the year.

Problem of Shipment Delays

Shipment delays on previous commitments plagued dealers last year. Cocillana bark, imported peppermint leaves, ipecac and columbo roots were all in short supply as a result. A tightening of existing Food and Drug Administration regulations last year resulted in detainment of considerable quantities of licorice root. Faced with high recleaning costs, shippers abroad raised their prices in order to cover the additional expense. Subsequently, further shipments of licorice root met FDA standards, on the whole, and the market settled back to normalcy. The failure of Socotrine aloes to meet dealer specifications resulted in the curtailment of imports coming in during the latter part of the year.

Activity in the vanilla bean market continued quite intense last year. Prices rose steadily throughout the year with the exception of a slack period in May when there was a slight decline of 10c. to 25c., reflecting some easing in France and Madagascar. The market resumed its advance in June and continued into 1954. Crop estimates on Madagascar beans varied anywhere from 125 to 200 tons during the year as reports came in on the condition of the crop. In the latter part of the year it was reported that flowering of the vines was not too good and that the outlook for the 1953-54 crop was about the same as for the crop harvested in 1953. A yearend estimate of the Madagascar crop put production around 175 tons. The Comores crop was estimated to have totaled ninety tons, while the estimate for this coming year varied between sixty-five and seventy tons. The average crop in this island group usually runs around eighty to 100 tons. The Reunion crop was estimated at about thirty-five tons for 1953, about average.

Mexican Bean Crop Short

The Mexican vanilla bean crop was very short last year with late estimates placing it in the neighborhood of fifty to seventy-five tons. No offers were heard on the 1954 crop. Tahiti beans were completely sold out last year with prices hitting an all-time high. It was thought that some small stocks were held back by curers who were awaiting further price advances. The very small crop (fifteen tons) of Java beans last year resulted in very high prices in Holland. Ordinarily, the demand for such type beans is virtually nil in the market here.

Pricewise, Bourbon beans started the year at a low of $3 and finished it at $7. Mexican cuts were $4.50 at the beginning of 1953 and finished at $7.25, nominal. Whole beans varied between $4 and $7.50.

Trend of Botanical Drugs, Spices, Gums Prices

100=1949 Average

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	1953											
H.	106.97	107.00	107.56	107.47	107.87	109.00	109.18	109.84	110.96	112.31	112.45	112.43
L.	103.30	106.94	106.70	107.04	107.14	107.84	108.92	109.28	110.31	110.83	111.36	111.77
	1952											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	118.56	117.81	118.13	118.24	113.59	113.59	102.88	100.38	100.46	102.53	103.60	103.72
L.	118.24	117.81	117.81	116.20	113.59	102.64	98.99	99.16	100.12	100.25	103.26	102.71

Tahiti vanilla started off at $2.40 and were pegged at $6.25 nominal at the year's end.

The seed and spices market in 1953 was about on an even keel with the previous year. There were the usual price fluctuations with crop shortages contributing to price advances in anise, psyllium and sesame seeds, among others.

Trends in Black Pepper

Black pepper experienced one of its most difficult years. Heavy arrivals of Lampong late in December, 1952, started 1953 off with large stocks. In addition to this, heavy marketing of India's crop over the January/March period made the immediate outlook very poor. Beginning in February speculative forces joined hands and virtually bulled the market up to $1.55 by the end of March. This was an unseasonable advance coming at the poorest consumption period. It did not hold, but it took virtually the balance of the year for pepper to recede to a level that more consistently reflected actual supply and demand conditions.

Over the year the average spot price of Malabar black pepper in New York was $1.28. This was a decline of 24c. from the average price of a year ago. In a way, it indicates the general underlying trend in pepper. Each year since the war the total world production has increased slightly. This year the Sarawak crop provided a good part of the total increase in supplies available to the world. Some trade sources expected that Lampong will gradually play a larger importance and some increased production of Sarawak as well as Malabar can become available. It was not anticipated that these increases would be of sufficient size to cause a major change in the price level. But another decline similar to that witnessed over the past year could be expected, some quarters held.

Indies Pepper Tax

For many months, it has been rumored that India may be forced by competition to remove at least part of her export tax on pepper. If this situation comes about this year, there probably will be a tendency toward lower prices.

Imports of white pepper during 1953 were approximately 100 tons less than in 1952, trade sources reported. Pricewise, white pepper sold at a substantial discount under black, as had happened during a large part of 1952, but to a lesser extent. There was anticipation that the lack of interest in white pepper might cause producing areas to market more of their crop as black pepper in the coming year, thus avoiding overproduction. There was further speculation that white pepper prices in coming months would have less relationship to fluctuations in black pepper, because of a generally tighter supply situation.

With the total exclusion of imports of Saigon cassia and China qualities last year, the Batavia grades received broader attention, and in the last two months of 1953 prices strengthened substantially. Imports were heavy last year, and there was a good deal of stockpiling throughout the country. However, as long as there will be no China imports, a steady flow of supplies from Indonesia will be needed. Despite the advance in the market prices, Batavias are still regarded fairly reasonable when postwar conditions are considered. Generally, the outlook is for the market to maintain its advance, and perhaps do better during this year. When stocks of Chinas and Saigons are all consumed, an increase in the demand for Batavias appears likely.

Price Changes in 1953

—Continued from page 36

		1953	1954
Woodflour, 40 mesh, bulk, c.l., works, East	ton.	32.00	32.00
60 mesh, bulk, c.l., same basis.	ton.	37.00	37.00
80-100 mesh, bulk, c.l., same basis	ton.	45.00	45.00
Wormseed, American, bgs.	lb.	.14	.30
Levant, bgs.	lb.	4.25	4.25

X

Xylenol, cryst., 56°-58°, tanks, works, frt. equald	lb.	.25	.30
45°-47° C., dms., l.c.l., frt. equald	lb.	.212	.215
fractions, over 7° C., b.r., except meta, tanks, same basis	gal.	1.20	.85
meta fractions, over 7° C., tanks, same basis	gal.	1.35	.90
Xylidins, mixed, dms.	lb.	.39	.39
Xylol, coaltar, industrial, tanks, works, Bethlehem, Pa.	gal.	.33	.35
Birmingham dist	gal.	.30¼	.32
Chicago district	gal.	.33½	.35
Cleveland district	gal.	.33	.35
Geneva, Utah	gal.	.25	.27
Johnstown, Pa.	gal.	.31	.33
Lackawanna, N. Y.	gal.	.33	.35
Lone Star, Tex.	gal.	.35	.35
Lorain, Ohio	gal.	.31	.33
Minnequa, Colo.	gal.	.34	.34
Philadelphia, Pa.	gal.	.33	.36
Pittsburgh district	gal.	.30	.32
Sparrows Point, Md.	gal.	.33	.35
Terra Haute, Ind	gal.	.35	.35
Youngstown, Ohio	gal.	.30½	.32½
Xylol, petroleum, indust., 10°, works, Albany, N.Y.	gal.	.33	.35
Bayonne, N. J.	gal.	.33	.35
Baytown, Tex.	gal.	.31	.33
Chicago, Ill.	gal.	.33	.35
Philadelphia, Pa.	gal.	.33	.35
Providence, R.I.	gal.	.33	.35
Wood River, Ill.	gal.	.33	.35

Y

Yara yara, cns.	lb.	2.25	2.20
Yeast, brewer's dry, 50 Int'l B units per gram, 100-lb. dms	lb.	.47	.47
90 Int'l B units per gram, 100-lb. dms	lb.	.52	.52
200 Int'l B units per gram, 100-lb. dms	lb.	.56	.56
300 Int'l B units per gram, 100-lb. dms	lb.	.60	.60
Yellow, barium, chromate, CP, bgs., l.c.l., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.35	.35
Benzidin, AAA, bbls., dlvd.	lb.	1.91	1.91
AAOT, bbls.	lb.	2.06	2.15
Cadmium, CP, all shades, bbls., frt. alld. E. of Rockies	lb.	2.85	2.85
lithopone, all shades, bbls., frt. alld. E. of Rockies,	lb.	1.20	1.20
Chrome, CP, bbls., dlvd. N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul, contracts	lb.	.31	.31
Dlvd. Ala., Fla., Ga., La. (Shreveport), 1¼c. higher; Miss., N. C., S. C., Tenn., Dallas, Tex., 1¼c. higher; Ft. Worth, Tex., 1½c. higher; El Paso, Tex., 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, 1.6c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.			
Hansa 10B, bbls., same basis as chrome	lb.	2.15	2.15
G, pigment, bbls.	lb.	1.91	1.91
Iron oxide, natural, French type, bgs., c.l., works	lb.	.04½	.05¼
Peruvian type, bgs., l.c.l.	lb.	.0165	.038
pure, bgs., c.l., works	lb.	.10	.10½
Mercury oxide, bbls., 1,000 lbs.	lb.	4.15	4.15
Ocher (see Yellow iron oxide, natural).			
Zinc (chromate), bbls.	lb.	.25	.25
Yerba santa leaves, bls.	lb.	.32	.40
Yohimbine hydrochloride, bots., tins	oz.	4.75	4.75

Z

Zein, bgs., 30,000 lb. lots, works,	lb.	.32	.38
Zinc acetate, tech., bbls., dms., works	lb.	.27	.27
NF, VIII, dms.	lb.	.53	.53
Borate, bgs., c.l., dlvd. E	lb.	.192	.192
Carborate, tech., rubbermakers, bgs., c.l., works	lb.	.14½	.14½
Chloride, NF, gran., dms.	lb.	.42	.42
precipitated, powd., dms.	lb.	.26	.26
solution, 50% tanks, works	100 lbs.	4.75	5.50
tech., fused, dms., c.l., works.	100 lbs.	9.60	10.85
gran., fib. dms., c.l., works.	100 lbs.	10.60	10.60
Cyanide, kgs., over 1,000 lbs., works	lb.	5.23	5.23
Dust, pigment, bbls., c.l., works.	lb.	.16	.13¼
Fluoride, bbls., works	lb.	.40	.49
Hydrosulphite, dms., c.l., frt. alld.	lb.	.21½	.21½
Iodide, NF, jars.	lb.	4.92	5.25
Laurate, bbls.	lb.	.45	.45
Metal, slabs, E. St. Louis	lb.	.13	.10
Naphthalene, liquid, 8% Zn, dms., frt. alld.	lb.	.23½	.23½
10% Zn, dms., frt. alld.	lb.	.28½	.28½
Oleate, fused, bbls.	lb.	.36	.36
Oxide pigment, American process, lead-free, bgs., c.l., dlvd.	lb.	.1425	.135
leaded, 35%, bgs., c.l., dlvd	lb.	.1440	.14
50%, bgs., c.l., dlvd.	lb.	.1450	.14½
French process, com'l, green seal, bgs., c.l., dlvd.	lb.	.16	.15¼
red seal, bgs., c.l., ship't pt., frt. alld., dlvd.	lb.	.15½	.14¾
white seal, bgs., c.l., ship't pt., frt. alld.	lb.	.16½	.15¾
USP, ctns., c.l., dlvd.	lb.	.175	.1675
Phenolsulphonate, NF, gran., dms.	lb.	.39	.39
powd., dms.	lb.	.42	.42
Resinate precip., dms., frt. alld.	lb.	.26¾	.26¾
Silicofluoride, bbls., works	lb.	.12	.12
Stearate, tech., USP, ctns., c.l.	lb.	.37	.37
Sulphate, cryst., 22% Zn, bgs., c.l., works, frt. alld.,	100 lbs.	7.30	7.40
flake, 25½% Zn, bgs., c.l., works	100 lbs.	6.55	6.55
powd., 36% Zn, bgs., c.l., dlvd., same basis	100 lbs.	9.25	7.90
USP, gran., dms.	lb.	.26	.26
Sulphide, pure, bgs., c.l., dlvd.	lb.	.253	.253
fluorescent, fib. dms., less than 1,000-lb. lots, works,	lb.	1.10	1.10
phosphorescent, fib. dms., less than 1,000-lb. lots, works	lb.	1.85	1.85
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	9.05	9.65
Undecylenate, dms.	lb.	2.25	2.25
Zinc-cadmium sulphide, fluorescent, fib. dms., under 1,000 lbs., works	lb.	2.10	2.10
Zinc-calcium resinate, dms., c.l., works	lb.	.1180	.1180
Zinc-formaldehyde sulphoxalate, basic, dms.	lb.	.25½	.25½
Zircon (G) granular, bgs., c.l., works	lb.	.03⅛	.03⅛
milled, bgs., c.l., works	lb.	.04⅛	.04⅛
Zirconium acetate, 13% sol. ZrO_2, c.l., 30,000 lbs. min., works	lb.	.23	.23
Carbonate basic, cake, bbls., works	lb.	NP	NP
Hydride, cns., works	lb.	7.25	7.25
Nitrate, dms., works	lb.	4.50	4.50
Oxide, 98½-99%, white, grd., bbls. or bgs., works	lb.	1.50	1.50
lump, electric-fused, bgs., less than 500 lbs., c.l., works	lb.	.44	.44
milled, electric-fused, bgs., c.l., works	lb.	.59	.59
Oxycloride, cryst., ctns., 5 ton lots, works	lb.	.32½	.35½

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Essential Oils, Other Aromatics

Essential oil prices remained steady at a comparatively low level throughout the past year, leading consumers to purchase cautiously and for immediate needs only. This condition proved troublesome to the industry, as it produced more rush orders than ever before, and also made it difficult for dealers to carry large inventories without an accompanying risk. The volume of orders throughout the year, however, proved good, without being spectacular, and total sales broke neither the high nor the low records of the past.

Aromatic chemicals experienced a remarkably steady price trend throughout the year. This was particularly true of all the items not derived from essential oils, and therefore not dependent on the vagaries of crop yields. The removal of price controls on all aromatic chemicals and essential oils by the Office of Price Stabilization, with the issuance of General Overriding Regulation 44 on March 13, produced almost no effect on prices. The vast majority of aromatics and essential oils were selling below ceiling prices before removal of controls. The year was definitely one of buyers' markets.

Coumarin Withdrawn From Market

Sales of coumarin for food use was voluntarily ceased by producers during the week of May 18. The action was the result of pharmacological research that raised a question as to the safety of coumarin, particularly in view of the increasing use of the material. Withholding coumarin from human consumption was regarded as a precaution in the interest of public safety, even though neither the industry nor the Food and Drug Administration knew of any case of human illness traceable to the material. FDA commended the members of the chemical industry for their action in the public interest.

A subsequent development was the issuance by FDA during the week of November 2 of a proposed amendment to its definitions and standards of identity for cocoa products to prohibit the use of coumarin in the preparation of various chocolate products. Coumarin had been specifically included among the optional artificial flavoring ingredients of chocolate products in the standards of identity promulgated in 1940. Final action by FDA had not been taken at the year's end.

California Orange Oil

California expressed orange oil ranged from 90c. to $1.25 per pound, depending upon brand, at the beginning of the year. The low-of-the-range declined during the first quarter until it reached 65c. per pound at the end of March. Quotations tended to firm in the second quarter, and one major brand went from $1 to $1.25 per pound in April. The orders received from producers of beverages and soft drinks, preparing for summer consumption, proved the most important factor in strengthening prices. The summer's production in California was sufficient to supply the market with its needs, and to avoid any pinch. Prices weakened slightly after the end of summer business, and quotations from some sources dropped to as low as 70c. per pound by the last of December.

Florida expressed orange oil was offered from 90c. per pound and up during the first week of January. This price gradually eased downward as material from the new crop reached the market. Supplies were found to be ample to cover consumers' needs, and prices remained depressed well into the second quarter. Material was offered from 65c. per pound and up during much of March and April. Some firming was noticed as a result of buying for preparation for summer sales of beverages; prices reached a range of 80c. per pound and up during June. During the last quarter, quotations dropped seasonally, and the final range extended upward from 66c. per pound.

Lemon Oil Scarce

Demand for lemon oil so far exceeded production that the tightness of this material was a familiar story throughout the year. The development of new lemon orchards in California, the best solution to the shortage, presented too complex a problem to be settled easily. Prices for California oil ranged from $5.75 to $6 per pound, depending upon supplier, at the start of the year, and all subsequent changes were in an upward direction. One major brand sold at $6 per pound in January. This price increased to $6.50 in the third week of March, and jumped to $7.25 in the middle of July. Prices at the end of the year ranged from $7.10 to $7.50.

Consumers turned to Italian lemon oil to fill some of their requirements and to ease the shortage, but frequently experienced difficulty with this material. Much adulterated oil was shipped to this country, and detentions by FDA ran high. Prices for Italian lemon oil also firmed steadily, going from a minimum of $6 per pound in January to a minimum of $7 in December. Good quality Italian oil was considered by many consumers as too high priced to compete with domestic oil.

Argentina proved to be a new source for lemon oil during the year. A factory was constructed in Concordia, Argentina, and material from these facilities began arriving on the American market in November.

Citronella Oil Prices Weaken

Citronella oil suffered the setback of drastically weakened prices during the year. Formosan oil was selling at 50c per pound and under during the first quarter, while Ceylon was offered from 50c per pound and up. Although demand was moderately active, supplies were more than adequate to cover market needs. Prices to consumers in this country were very little above the cost of producing the oil, so that many dealers feared a drastic cutback in output. Incentive to produce the oil would disappear, it was feared. An advance in prices was noted during the first week of April for both Formosan and Ceylon material. Ceylon material moved up to a minimum of 55c., while Formosan was offered from 50c. For the following months, prices steadied.

Extremely large shipments of Formosan material entered the country, but the greater part of these shipments was held in firm hands. Prices throughout the summer remained so low that only a slim margin of profit was possible to dealers.

Formosan Oil Upper at Source

A major shift was the increase in prices at the source for Formosan material during the final quarter. Ceylon oil also was advanced, and spot prices for both were thus forced up substantially. The gradually increasing strength was in evidence throughout November and December, with 60c. per pound the lowest price heard for each type at the end of the year. Most sources quoted considerably higher than this figure, however.

Lemongrass oil was priced from $1 per pound and up at the beginning of the year, and had just moved into a stronger position. Prices at the start of the year were felt to offer more inducement for continued production. The price trend continued upward and spot and replacement offers were advanced in March, bringing the former to $1.15 per pound. Price schedules, however, were not fully maintained throughout the summer and a series of decreases brought the low-of-the-range down to 90c. per pound before a reversal set in in November. For the balance of the year, shipping prices spiraled and the market ended the year in a strong position. Buying remained on the cautious side, in part because the placing of large orders tended to bring stronger views at the sources.

Mint oils showed a mixed picture. Inquiry for spearmint was quite active at the start of the year, and stocks were not considered excessive, causing prices to hold firm. A quotation of $7.75 per pound was the low-of-the-range at that time, but most quotations ranged higher. In contrast, inventories of peppermint oil were quite adequate and consumers found no difficulty in filling their needs. Natural peppermint oil was quoted from $5.50 per pound at the start of the year, while redistilled material was priced from $5.75. Prices on spearmint in the country continued to firm, forcing up spot quotations and bringing some consumer resistance. By the end of March, spearmint oil could be had for not lower than $8.25 per pound. Peppermint, however, was in quite adequate supply and prices remained easy.

Mint Plantings in 1953

When the 1953 crop went into the ground, mint growers in the five chief producing states increased their plantings of spearmint and lowered those for peppermint. The higher price commanded by the former was the inducement. Growing conditions proved unfavorable in some areas, particularly during August. Pro-

Trend of Essential Oil Prices
100=1949 Average

	1953 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	166.00	161.48	160.36	159.15	154.60	153.75	153.03	151.47	150.64	147.70	147.49	149.01
L.	163.42	160.81	158.02	154.27	154.39	152.56	151.40	150.65	146.61	144.59	145.75	145.84
	1952 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	181.91	181.04	184.13	194.04	193.56	188.49	179.98	179.62	173.82	171.84	167.13	169.63
L.	178.73	179.60	176.81	187.30	189.04	182.66	179.54	170.45	170.40	167.85	166.77	166.57

duction reports from the five chief producing states indicated a total output of 2,235,000 pounds, 3 percent below the 1952 total, but 7 percent above the 1949-51 average. Peppermint oil production made up 1,461,000 pounds and spearmint oil 774,000 pounds of this total. The second cutting of peppermint oil tended to be lower than normal in many growing areas, particularly in Indiana, because of drought conditions. Peppermint oil prospects were found to be 19 percent below those for 1952, while spearmint oil topped 1952 by 52 percent.

The effect on prices of the crop was to push spearmint oil downward and peppermint oil upward. Natural peppermint oil was priced from $5.60 per pound and up at the end of the year, well above the low for the year reached in the summer. Spearmint was offered from $5.70 per pound in December, but during the final weeks of the year, showed strong signs of a rally.

Wormseed Oil Prices Decline

Among other domestic oil crops, wormseed tended to decline in price throughout the year. Supplies were very tight, following a poor yield in 1952, and the minimum quotation stood at $8.25 per pound in January. The firm views of holders in Maryland helped keep prices from sagging suddenly. The first real break in prices came toward the end of the summer, when some holders in the country endeavored to move the 1952 holdover before the arrival of new material. A drought in the growing area was at first expected to reduce the year's output by as much as 50 percent. When the crop was in, however, this figure was found to have been exaggerated, and production was close to normal. In spite of the high quality of the 1954 oil, a reduction in prices was effected, and the material was offered from $6.50 during October. Prices continued to drop and a low of $4.60 was reached by the end of December.

Cedarwood and cedarleaf oils presented a stable price picture through the first three quarters of the year, and became firmer in December. Higher production costs were the cause of the strength. The price of wormwood oil varied little during the year. Prices ranged from $5.55 per pound in January and were to be found only 5c. lower in December. The crop was large enough to fill the needs of the major consumers of this material.

Anise and cinnamon USP (cassia) oils became increasingly short on the market as a result of the continued enforcement of the trading with the enemy act. The control regulations inaugurated in 1950 by the Treasury Department were rigidly enforced. Dealers' stocks of both of these materials, once imported from China in large quantities, could not be replaced. Anise, USP, was offered from $2.35 per pound in January. Spot prices for drum lots dropped as low as $1.75 in March, but the general trend was upward, and the material, where it was still available, was priced from $2.75 at the close of the year. Stocks of cinnamon oil, USP, dwindled to the point where virtually all dealers withdrew quotations, reserving whatever amounts they might still possess, for their regular customers. Because of continued government opposition to trade with communist China, no immediate easing in the ban on imports of these oils was expected.

Bergamot oil began the year in a favorable price position, as the Consortio had, in December of 1952, lowered the floor price. Material was offered on spot from $11.75 per pound in the first week of January. Supplies were somewhat easier than they had been during the previous year. Prices held very steady throughout the year. A break in prices was expected to follow the 1953 crop, which was estimated as about 20 percent above normal. Floods during the week of October 19 in southern Italy, however, damaged a large number of trees and reduced the yield by 20 percent, bringing it down to normal levels. The material ended the year with a price range extending upward from $10.75 per pound. Purchases of bergamot oil by Russia and other European countries helped add strength to this market.

Prices for Brazilian bois de rose oil showed a steady firming and most changes throughout the year were upward.

Geranium Oil Price Shifts

Geranium oil occupied an easy position in the first quarter of the year. Bourbon oil ranged upward from $10.85 per pound and Algerian from $10.25 during that period. Each was offered in amounts ample to fill a steady but not spectacular inquiry. Spot prices for Bourbon oil declined during the summer and reached their low for the year, $9.75, in June. Stronger replacement costs and a moderately active inquiry helped firm the price situation until at the end of the year, a minimum of $10.75 per pound was en-

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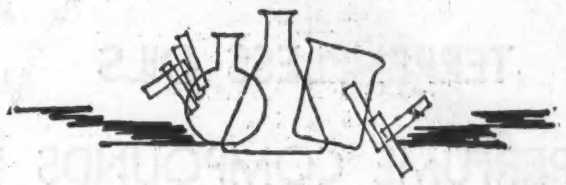

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countered. The price pattern for Algerian material was gradually downward, with spot offers as low as $8.35 reported in December.

As the large stocks of patchouli oil were absorbed during January, the price on spot became firmer. The oil attracted interest at slightly advanced levels, and the low-of-the-range price was found at $7.45 per pound in February. The minimum spot price moved up to $7.85 in the fourth quarter, and in December a spot price of $7.50 was the lowest to be found.

Dalmatian Sage Oil

Dalmation sage oil dropped from $7.50 to $7 per pound during January, and made further declines in consumers' favor during the first six months. A minimum of $7 was offered throughout most of the summer, and this figure had advanced to $7.30 by the end of the year. The Spanish and clary varieties made few shifts in price during the year, and were available in ample amounts for market demands.

Rosemary, spike lavender and other Spanish oils were generally depressed in price throughout the year. Like many of the perfume oils, vetiver oil remained on the weak side throughout the year. Consumers tended to make purchases for their immediate needs only. Lavandin oil remained comparatively steady over the entire year. Some downward movement developed, bringing January's price of $2.50 down to $2 by the end of the summer, but a firming process set in and, at the end of the year, the outlook was upward for all price changes. The size of the 1953 crop, however, made it doubtful if any sudden increase could be sustained, and indicated that stocks would remain adequate.

Lavender Oil Supply Ample

Lavender oil remained in satisfactory supply during the first half of the year, with a sufficient carryover from the earlier crop to fill users' needs adequately. Prices for oil of a lower ester content became weaker, but higher percentage oils remained steady. The size of the 1953 crop was sufficient to prevent any sudden change in replacement costs, although holders in France tended to firm their views late in the year.

A comfortable supply level characterized the market for eucalyptus oil throughout the year. Buying was fairly quiet at the beginning of the year, and picked up when producers of pharmaceuticals and proprietary medicines began covering their needs for fall and winter consumption. The competition Australia met from other countries proved an important reason for the steady price level. Material of 80-90 percent ranged from 90c. per pound in January to 82c. in December, while 70-80 percent oil dropped from a low of 75c. in January to one of 60c. at the end of the year.

Clove Oil Drops Steadily

Clove oil, USP, became gradually more favorable to the consumer as prices dropped steadily. Lower costs for the raw material made the reductions possible. Ocotea cymbarum oil was available from 58c. per pound and up throughout the first quarter. Efforts by the Brazilian government to maintain a floor price helped account for the price stability of this item. A much firmer attitude at the source sent prices upward at the end of the year and the outlook became quite strong.

Aromatic derivatives of citronella oil were in adequate supply throughout the greater part of the year, following the easy availability of the raw material. Prices of citronellal, citronellol and hydroxycitronellal avoided many of the price fluctuations of the oil from which they were derived, but became considerably firmer toward the end of the year when the raw material was advanced sharply.

Citral Price Pattern

The price pattern of citral followed that of lemongrass oil, becoming slightly weaker during the first half of the year, although no drastic price drops were effected. A low quotation of $3.20 per pound was reduced to $3 in November. Then the trend was reversed with the mounting costs of the raw material, and the outlook was for firmly maintained price schedules by the end of the year.

Demand for eugenol was maintained steadily at the high levels established earlier and most manufacturers noted a good call for the technical variety, as well as for the USP material. Demand for anethole was stimulated by the drastic shortage of anise oil. Users turned to the aromatic in their formulas where such substitution was possible. Prices for bois de rose oil derivatives fluctuated over a comparatively narrow range. Prices for synthetic musks eased slightly. For example, purchase of ambrette, in 100-pound lots, could be made at $5.35 per pound in January and at $5.15 in December.

Coal Chemicals

—*Continued from page 3*

due to heavy government requirements for nitration and avgas. TNT production eventually got to the point where it was requiring more than 70 percent of coaltar output. Petroleum operators reported that slightly better than 90 percent of their production was going for aviation gasoline by the end of June.

As a consequence of heavy military requirements, industrial consumers found very little toluol around to meet their needs. A number of producers took to allocating their available material to industrial users on the basis of the consumer's end-product and its importance to the health and safety of the nation and its economy. The standing of the consumer as a long-term regular customer was also a consideration, of course. However, as suppliers could not satisfy everyone, a large number of buyers switched their operations to the use of xylol or other substitutes wherever it was practicable. The overflow of demand from toluol kept xylol in tight supply throughout the year. Some improvement in the entire supply situation for light oils developed about the last month of the year. The easing of pressure came about as the halt of fighting in Korea lessened the urgency of needs of TNT and aviation gasoline.

Avgas Production Dwindles

Government requirements of toluol for avgas during the fourth quarter dwindled inasmuch as high production all through the year had exceeded earlier hopes. Then, too, a shortage of plate steel—an outgrowth of the protracted steel strike of 1952—had left a deficiency in storage capacity. Added to this was the knowledge at the end of the year that January and February, 1954, directives for toluol would be cut back to 50 percent of coaltar output, 20 percent less than it had been all year.

Another material which began last year in a tight supply position was refined 2-degree pyridin. This tar base had been consistently in short supply since the outbreak of the Korean war. A large diversification of end-uses was plagued by limited production capacity in the heavy buying period. As pyridin is obtained in far less proportion than say, benzol, naphthalene, or ammonium sulphate during cokeoven operations, an increase in crude tar bases is necessary for any boost in natural pyridin output. Consumers, knowing this, bought heavily and spread out their orders for refined pyridin many times among various sources of supply.

Pyridin Demand Eases

This was the situation carried over from the previous years. The 2-degree material began in 1953 in short supply. But the pressure gradually began to come off. By early summer, it was available in drum quantities. In the last half of the year, pyridin was in a long supply position. Several forces were behind the easier tones of the market. Discontinued uses accounted for a significant part of the drop in demand. Substituted pyridins such as vinyl pyridin and 2-methyl-5-ethyl pyridin, cut into the market a little bit. The fact that consumers knew production of synthetic refined pyridin was on the way also helped ease the tension.

There were no other shortages of long-standing among large volume coal chemicals. Paraphenyphenol was short at the beginning of the year due to continued government call for phenolic resins derived from the material and used in varnishes for the navy. However, the situation was greatly eased when the military withdrew from the paint business. Anthraquinone started out 1953 in short supply due to a labor dispute at one producer's

Trend of Coal Chemical Prices

100=1949 Average

	1953 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	113.47	113.24	113.24	113.71	114.14	114.14	114.56	114.60	114.60	114.61	114.61	114.59
L.	113.47	113.22	113.22	113.24	113.71	114.10	114.21	114.57	114.60	114.61	114.59	114.59

	1952 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	113.88	113.88	113.71	113.71	113.71	113.71	113.72	113.72	113.63	113.56	113.50	113.51
L.	113.88	113.88	113.71	113.71	113.71	113.71	113.72	113.62	113.56	113.50	113.50	113.47

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plant near the end of the previous year. That deficiency was worked off quickly, when operations returned to normal. Anthraquinone was also threatened with another potential shortage during the long phthalic anhydride strike at a producer's plant. However, that shortage was avoided because increased phthalic production averted trouble and producers were able to meet all consumption requirements.

Consumer Industry Operations

A high degree of activity at the outset of the year in such consuming industries as automobiles and home appliances resulted in very good sales of many coaltar products. Toluol and xylol enjoyed good industrial demand for finishes. Benzol moved in good volume to the rubber industry which made not only new, but replacement tires as well, at a good pace. Styrene moved in excellent volume in the first quarter to the rubber trade—this is chief way that benzol gets into that end-use—and also to polystyrene plastics. Rubber chemicals — Mercaptobenzothiazole; the sulphur salt, MBTS, and diorthotolyguanidin—all moved at an especially good rate in the spring. Other rubber acccelerators, retardants and intermediates sold in excellent volume during this busy season.

They moved well for most of the rest of the year, until, the rubber industry slowed down a bit in the last quarter. The government made cut backs in its rubber reserve program. The market for replacement tires showed signs of surpluses by widespread price cuts. Huge surpluses of used cars slowed the movement of new cars and forced some production cutbacks. Shutdowns for model changeovers were deliberate and unhurried. Even so, sales of rubber chemicals did not slow down completely. There was a lull before the yearend. Moreover, demand came back in the last weeks of December for rubber chemicals, after consumers had pared inventories too much.

Prices Parallel Supplies

The change from a strong, active demand and short supplies at the start of the year to markets with ample supplies and weaker demand at the end of the year also had a somewhat parallel price picture. A thumbnail sketch would indicate that prices were on their way up from January through August 31, while they held fast during September, and started down in the period from October through the end of December.

The coaltar industry started out 1953 under price controls, as did the rest of the chemical trade. Coal chemicals came under the general regulation of CPR 22 and the special supplement, SR 13. A series of three amendments to SR 13, which started late in 1952, allowed restricted increases of ceiling prices to account for added costs of freight, handling, and labor. Under this price relief, benzol schedules edged up, refined pyridin advanced the full 10 percent allowable for any one item to be increased, and the other tar bases rose slightly. Coaltar, for resale, advanced. Crude and refined creosote came up too. Finally, coal chemicals were decontrolled by the Office of Price Stabilization on February 18. Reaction did not come immediately.

Refined Pyridin Advances

A month after price controls came off, refined pyridin came up to a straight $1.15 for all sources of supply. Then, early in April, benzol was advanced to the 40c. level, with some areas quoting slightly higher. Benzol demand was still strong enough to withstand the general advance. Consumers had been buying coaltar material quickly, for they remembered the long steel strike of 1952 and did not want to get caught without supplies if a new wage agreement was not reached.

Between mid-February and the end of April, there were a number of scattered advances for intermediates. Cyclohexylamine and dicylclohexylamine both were increased 5c. Methyl cyclohexanol was advanced 1c. Piperidine came up 30c. Coaltar industrial pitch, 140-150° F., came up $3.20. Orthochloroanilin, para-anisidin, paranitrochlorobenzene and paranitrophenol were all advanced in the last weeks of April. In mid-May, coaltar dyes for textile use were increased from 5c. to 39c. Methylphenylpyrazolone and trichlorobenzene, as well as paranitroanilin and technical salicylic acid were advanced.

General Rise in Intermediates

The general advance for intermediates came at the beginning of July when increases ranged from 15c. per pound for alphanaphthol down to 1c. per pound for sulphanilic acid. Among the larger volume intermediates, technical acetanilide came up 2½c., anilin oil advanced 2c., anthraquinone rose 3c., monochlorobenzene was increased 1c., orthodichlorobenzene was also up 1c. and nitrobenzene came up 1½c. For rubber chemicals, the advance in MBT was 3c., MBTS increased 4½c., diorthotolyguanidin rose 3c. and diphenylguanidin increased 3½c. per pound. The increases of intermediate schedules were attributed to added costs of production, including raw material costs, higher freight rates, labor and handling costs, all of which were not fully offset during the period of price controls.

There were further scattered raises for other intermediates to the end of August. Even toluol and xylol prices, which had not moved since 1950, were advanced. However, a foreshadowing of some of the declines which were to take place in the last part of the year was hinted in late July via reductions for maleic anhydride, fumaric acid, isonicotinic acid and 82-84 percent phenol.

Fumaric, Maleic off Again

Fumaric acid and maleic anhydride came down a second time during November, when added price inducement was offered to capture a larger share of the market for polyester resins. The July and November reductions for both items totaled 10c. per pound. Price activity was a little less frequent in the fall months. But octyl phenol was cut 3c., which precipitated a drop of 3¼c. for nonyl phenol, both taking place in the last week of November.

By fall, demand for benzol had slowed down somewhat and increasingly competitive conditions forced suppliers who had been quoting above the 40c. level to come down to that figure. At the same time, producers frequently had to equalize freight costs with the nearest competitive producing points in order to secure specific contracts. Thus, at yearend all producers were on the same price basis.

Benzol prices stood up despite substantial inventories of raw materials and finished products held by producers and consumers. To some extent, they held because of those inventories. Producers and consumers alike stood to lose sizable amounts by cutting schedules. Further, nothing would have been gained in the way of better movement by dropping quotations. The buildup of inventory had been the result of cutbacks in the government rubber program, lowered demand from polystryrene plastics in the fall, and unimpressive buying interest from phenol, intermediates, textiles, pharmaceuticals, and insecticides. The picture was not entirely bleak, because styrene and phenol, the two large outlets, showed potentiality for a pickup in 1954.

Benzol producers aiso agreed that the long range view of the benzol market was still very good. In fact, present output capacity did not appear to be enough to cope with future demand. Nevertheless, the immediate problem was to move regular production and accumulated inventories. Some producers were in a little better shape than others, but all had ample material to meet consumption needs of consumers. Part of the surplus was reported to have been moved from time to time as motor benzol. This came as little surprise, since it has been done many times in the past during times of oversupply. However, the price for industrial and pure benzol was closely held and not allowed to slip as material moved off the market in this manner.

Phthalic Anhydride Comes Down

In the middle weeks of December, a 2c. cut in phthalic anhydride was effected to make the intermediate a more attractive buy for polyester resins. The reduction precipitated a decline in naphthalene schedules. Crude domestic material came down to 5c. per pound, which virtually had the effect of limiting imported hot-pressed naphthalene sales to seaboard areas. Industrial refined and refined ball and flake naphthalene were lowered with crude. At the year end, refined 2-degree pyridin fell off 20c. per pound, going back to a 95c. price. Weak demand for synthetic phenol brought on a reduction of 2c.

Looking at demand in the closing weeks of the year, it was seen that strong activity for the tar acids kept sales relatively good, with the possible exception of the final weeks of December. Inventory consciousness brought the normal bugaboo of curtailed demand at the yearend. The cresols and cresylic acid had been moving in very good volume for several months to cresylic resins, tricresyl phosphate and aircraft engine cleaner business. Demand for grades high in meta xylenol content was heavy, keeping those fractions tight. A strong, sustained inquiry for metaparacresol from "TCP" developed out of the phosphate's use as a gasoline additive introduced at midyear. Naphthalene was in ample supply at the yearend, as were phenol, orthocresol, creosote, pyridin, phthalic anhydride and styrene monomer.

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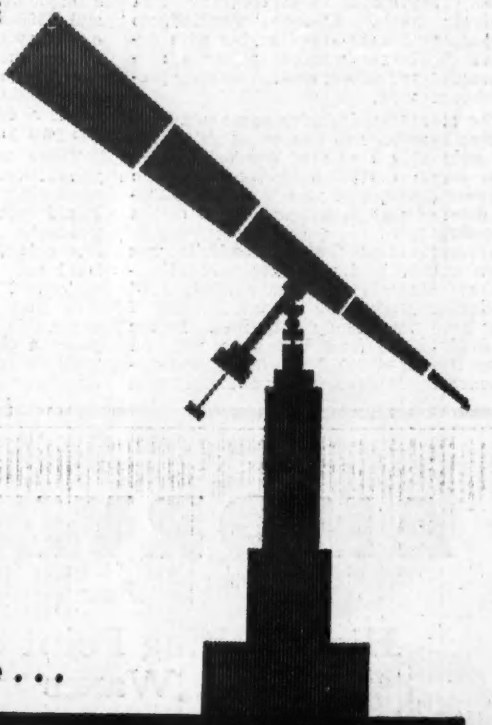

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Petroleum Derivatives

The year 1953 marked a turning point for American postwar industry. There was a subtle change of complexion last year. Expansion of industrial productive capacity has been going on for several years—fighting shortages, especially since the start of the Korean conflict. Most of the critical shortages were ended last year. At least the supply picture was improved. Industry has built up an inventory cushion in both consumer and producer goods. Concern was felt no longer about short supplies, but with demand. Producers wanted to see a sustained demand strong enough to keep production moving.

The petroleum industry was among the leading industries to expand output, keeping pace with a soaring demand. Nineteen hundred and fifty-three was the eleventh consecutive year in which domestic demand was in excess of that of the preceding year.

Although stepped-up productivity was again evident last year, the rate of expansion slowed down somewhat. All production goals were at least in sight, if they have not already been met. In the meanwhile, demand has been met on many fronts. Critical shortages have disappeared. And competitive selling was once more a large factor in the markets for many materials. The markets for petroleum products fully demonstrated that fact during the last quarter of the year.

Demand up 6 Percent in 1953

An illustration of how well buying interest was met in 1953 was given in a yearend statement by a top executive of a major firm. He said, " . . . between 1949 and 1953 demand increased 33 percent, or an average of 8 percent a year. In 1953 demand was approximately 6 percent above 1952." Leaders of the petroleum industry anticipate that 1954 will bring a demand 4 percent greater than the past year.

There was a general expansion of oil production, transportation, refining and marketing facilities in 1953. Output of liquid petroleum, natural gas and oil products surpassed all previous peaks. In the doing, a reserve cushion has been built up. The additional supplies were welcomed by consumers and were desirable from the standpoint of national defense. However, the easing of supplies poses a challenge to the industry's competitive spirit. Trade sources look for an intensification of competition both within the domestic industry and in markets for imported crude oil and petroleum products.

Domestic Statistical Estimates

Domestic demand for 1953 was estimated at 2,781,000,000 barrels, up 116,000,000 barrels over 1952, according to the American Petroleum Institute. Domestic supply was estimated at 2,608,000,000 barrels, 94,000,000 barrels more than the previous year. The 1953 supply figure included 2,363,000,000 barrels of crude oil, and the remainder was natural gas liquids. Natural gas production was estimated at 10,990,000,000,000 cubic feet, an increase of more than 700,000,000,000 cubic feet.

Average domestic demand in 1953 was 7,619,000 barrels a day, while total demand averaged more than 8,000,000 barrels per day, including exports. This was the first time in US history that the 8,000,000 barrels per day market was exceeded. It also represented an increase of more than 300,000 barrels per day, for every day of the year.

Refinery capacity was enlarged greatly during the year, so that producers could handle increased requirements of the present and those of the future, and so that a reserve capacity was available for the military in the event of a national emergency. Estimated refining capacity at the yearend indicated a total of more than 8,000,000 barrels per day, another new high. In addition, operable refinery capacity is expected to reach 8,360,000 barrels a day by next September 30.

Crude Oil Refining Runs

Refinery runs of crude oil in 1953 were estimated at 2,556,000,000 barrels, an increase of nearly 115,000,000 barrels over 1952 production. The daily average was more than 7,000,000 barrels a day, also an all-time record and the first time that an average of 7,000,000 barrels or more per day had been maintained. Crude oil production throughout the entire world (including estimates for Russia and the satellite states) was estimated at 4,755,000,000 barrels by the American Petroleum Institute. Of this, the United States accounted for 2,363,000 barrels. Percentage-wise, the US tottal dropped to 49.7 percent of the world total—the first time that the rest of the world combined produced more crude oil than the American industry.

Demand among individual petroleum products followed normal seasonal trends during the year. Among solvents and diluents, buying interest held up quite well through most of 1953. Toluol and xylol started the year in short supply. The former was tight because defense requirements for avgas and nitration took the bulk of production through the first nine months. Toluol saw a bit of improvement in the last quarter when Petroleum Administration for Defense Order No. 3 was temporarily suspended from October 1 to December 31, and, finally, was rescinded altogether. Suspension of the order, which had controlled components of aviation fuel and prohibited the use of alkylates in motor gasoline, was originally announced with the explanation that sustained high production rates in the petroleum industry had surpassed anticipated results.

Further, a shortage of plate steel has also accounted for deficiencies in storage capacities for avgas. Military demand for avgas in the last quarter was substantially reduced. A steady reduction of pressure in the late months of the year brought toluol into an improved supply position. There was enough improvement to permit export of some toluol to friendly nations before the year was over. Although this aromatic did not finish out the year in abundant supply, the market had arrived at a point where industrial consumers were no longer hurting for the lack of material.

Xylol Situation Explained

Xylol was in tight supply during most of the year for two reasons. First, most of the equipment used to produce xylol is also capable of producing toluol. Hence, the heavy government call for toluol kept equipment running full time and left little distillation time for the production of xylol. Second, the defense needs of toluol left only a very small percentage of total toluol production for industrial consumption. Many consumers, therefore, went through the entire shortage using xylol because they could not get toluol. Then, too, there were the regular xylol consumers taking steady volumes. All added up to short xylol supplies as long as toluol was dear.

The supply picture improved in the last quarter, perhaps a little faster and to a greater extent than it did for toluol because the process works in the reverse order when markets are easing. In the partial aromatics, those with high aromatic percentage—or aromatic concentrates—enjoyed strong demand all through the tight toluol situation. They were frequently used by consumers as substitutes for toluol and xylol. Partial aromatics also moved in good volume as a substitute for coaltar toluol, as the latter was in short supply because of nitration requirements by the aresnals. Perhaps the easing of aromatics was most significant in the last quarter because they represented the final area of shortage carried over from previous years of soaring demand and heavy defense needs.

Aliphatics in Ample Supply

Aliphatics were in a much happier supply position, at least for the consumer, throughout the year. Supplies were generally adequate to meet requirements over the year. Seasonal fluctuations were more apparent here than they were among the most sought after aromatics. Buying interest never did gain full anticipated momentum for aliphatics during the last quarter. The fall paint season was a bit of a disappointment, but not a complete loss.

Demand was up slightly over summer seasonal levels, and at about the same pace as it was in the last quarter of 1952—not exceptionally good, but not bad either. VM&P naphtha lagged a little behind former levels. Mineral spirits finished the year at a relatively slow but steady pace. Hexane and heptane were in steady and fairly good call for use in solvent extraction of vegetable oils as the year closed. Demand for stoddard solvent was also steady and fair at the yearend.

Latex Paints and Solvents

When 1953 was about finished, producers of mineral spirits estimated that they lost about 5 percent of the year's demand to latex paints. Most sources also agreed in the feeling that water-type paints had about reached their peak and would cut no further into the market for solvents which are used in oil-type paints. Latex paints were not considered as a complete threat from every angle. Adaptability of such paints to methods and technics of the do-it-yourself type painter was so effective that they have created painting jobs and painting interest where there was no interst, or only lethargy before. A small home owner may tackle the easier jobs himself, but he frequently leaves work, which otherwise would not have been done at all, to professionals who are more likely to use oil-type paints.

Demand for the waxes fluctuated during the year with the normal seasonal trends for those markets. There were no extreme shortages of fully refiner paraffins of microcrystallines, even during the high points in activity. However, supplies did get a bit snug at times. Crude scale waxes became short when lubricating oil production cutbacks took place.

LPG's During the Year

Liquefied petroleum gases started out the year in good enough demand, as could be expected in that season. However, mild weather came early and supplies of butane and propane were not really pressed. By early summer, underground storage facilities were stocked up and the market got soft. The lack of cold weather in the last quarter kept the LPG market from firming up until very late in the year. Some spot material was still available at yearend.

Prices during the year were fairly steady. There was a general firming up of petroleum products after price controls came off. First crude oil schedules went up. Then widespread advances took place for aromatic solvents, lacquer diluents, aliphatics, paraffin, and gasoline. Some of the advances which had taken place in the first weeks of July were balanced by scattered reductions in the last quarter for gasoline, fuel oil, kerosene, and diesel oil—which came about as a result of improved stocks and weak demand. Another feature of the last quarter was an advance of packaging and handling differentials for waxes and petroleum sulphonates.

Trend of Petroleum Derivatives Prices

100=1949 Average

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
						1953						
H.	104.13	104.27	104.48	104.50	104.49	104.49	105.38	105.39	105.37	105.36	105.38	105.35
L.	104.13	104.13	104.27	104.48	104.49	104.49	105.33	105.36	105.29	105.37	105.35	105.30
						1952						
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	....	....	....	....	....	....	107.19	107.08	103.42	104.12	104.13	104.13
L.	....	....	....	....	....	....	107.08	103.96	103.20	103.86	104.13	104.13

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Textile and Leather Chemicals

Business in textile and leather chemicals in 1953 was reported fair to good in volume by trade sources. Consumers continued to limit purchases to prompt requirements and orders beyond thirty-day delivery proved the exception rather than the rule. Buyers bought supplies as needed and found it unnecessary to build inventories as stocks of most materials were ample and available for immediate delivery. Prices averaged slightly lower, the price index at the end of year amounted to 98.71 compared with 101.15 at the close of 1952.

In the chemical group, consuming demand was moderate, but of a steady character. Prices were without change, except for acetic anhydride, bicromates and sodium hydrosulphite. In March, producers reduced acetic anhydride ½c. per pound. Bichromates ruled firm throughout the year, advancing in June due to the increased cost of basic chemicals. Potassium and sodium bichromates as well as sodium chromate lifted ½c. per pound and the advance was maintained during the balance of the year and for 1954 contracts. Sodium hydrosulphite became easier in November and was dropped 1½c. per pound by producers.

Price Movements Tabulated

The following table indicates high and low prices for 1953, per pound, and on December 31, 1953, unless otherwise specified:—

Tanning Materials

	High	Low	Dec. 31, 1953
Chestnut ext., liq. tank-cars.	$0.0530	$0.0510	$0.0510
Cutch	.08½	.08	.08½
Mangrove bark, Afr., ton.	$79.00	$77.00	$77.00
Myrobalans, J1, ton	$48.00	$46.00	$48.00
Quebracho ext., ord.	.11 31/64	.11 31/64	.11 31/64
Valonia cups ton.	$64.00	$56.00	$56.00
Wattle bark, fair average ton.	$104.00	$100.00	$100.00
Extract, 60 tannin	.11	.10	.10

Sizing Materials

Corn dextrin, white	.0853	.0853	.0853
starch, pearl	.0714	.0714	.0714
Egg albumen, flake	$2.62	$2.19	$2.19
Yolk	$1.48	.95	$1.48
Potato starch, Maine	.06½	.05¾	.05¾
Sago flour, raw	.07¾	.07	.07¼
Tapioca flour, spot, Braz.	.17	.14	.14½

Demand for cornstarch for sizing purposes increased in 1953, due to the higher cost of potato starch and tapioca flour. Consumers substituted corn starch for these materials, placing contracts for liberal tonnage at a lower price. The price of corn starch was unchanged during the year and pearl was maintained at $7.14 per 100 pounds, carlots, New York basis. Corn dextrin also was quotably unchanged for all grades throughout the year.

Because of the scarcity and high cost of Brazilian tapioca flour, consumers switched to Javanese flour. Siamese flour was also employed when available at a lower cost. Offers of Brazilian tapioca flour continued light during the year as the bulk of the light production there was consumed domestically for edible purposes. Shipments were quoted nominally ranging from 12c. to 13½c. per pound, carlots, exdock, New York, when available during the year, while flour shipments from Java were quoted from 7c. to 8c. per pound, exdock, as to grade. Siamese was priced at 5c. to 6¼c. per pound, same basis.

Sago Flour Demand Spotty

Sago flour demand was spotty during the year. Volume of business was reported about fair. Price fluctuations were narrow, ranging from 7c. to 7½c. during the year.

Trend of potato starch prices was steadily downward in 1953, due to increased production in Maine and Idaho. Mills in Maine resumed operations early in the year after being closed during the major part of 1952 because of the high cost of potatoes. The potato market began to drop in the first quarter of the year and the cost of domestic starch declined. As the production of starch increased, prices fell below the cost of imported starch, which resulted in the stoppage of liberal imports from the Netherlands and Denmark. The low point of 5¾c. per pound carlots, f.o.b. Maine mills, was reached in December when sales of heavy tonnage were reported at that figure for prompt and future delivery. In February, 1953, carlots f.o.b. Maine mills were quoted at 8½c. per pound and compared to 5¾c. to 6c. per pound, as to seller, at end of the year.

Volume of trading in tanning materials proved disappointing last year. Tanners operated in a hand-to-mouth manner during the year, and orders were chiefly for limited tonnage lots for prompt shipments. Interest in forward deliveries was extremely light. The tanning industry continued to feel competition of leather substitutes and production ranged from 40 to 50 percent below capacity. Shoe leather continued to lag behind substitutes during 1953, taking only 42 percent of the market as against 58 percent for substitutes.

Quebracho extract remained the strongest on the list. Prices held steady during the year, reflecting the strength of primary sources. Cutch was offered sparingly and shipments were raised ½c. per pound in September. Trading in wattle bark was spotty, while wattle extract moved in better volume, after shipments were reduced 1c. per pound as a result of lower freight rates. Chestnut extract was in fair request and steady until the fall months when prices were cut fractionally for liquid and powder. Valonia cups developed a weak tone, declining to $56 per ton from $64 early in the year.

Shoe Output in 1953

Shoe production in 1953 was estimated at about 500,000,000 pairs by the Department of Commerce, against 508,000,000 pairs in 1952, which was about 40 percent of the world's output, maintaining the historic 3.1 pairs of shoes per person yearly. The United Kingdom produced about 142,000,000 pairs and was the only other country to exceed the 100,000,000 mark. This was about 2.8 pairs per capita. The Soviet Union was third with 89,000,000 pairs, a per capita of less than one-half pair. Available estimates showed that the world's output increased from 896,000,000 pairs in 1930 to 1,000,000,000 in 1940; to 1,200,000,000 in 1949 and to almost 1,300,000,000 in 1952.

During the first half of 1953 manufacturers and retailers overestimated consumer demand and, as the year progressed, both orders and production were sharply reduced. Sales of footwear in 1953 were divided by the Leather Industries of America into 221,000,000 women's shoes, 98,000,000 men's shoes, 123,000,000 pairs of children's footwear and 60,000,000 pairs of slippers. Leather producers tanned 21,800,000 cattle hides, 12,000,000 calf skins, 36,000,000 goat and kid skins, 28,500,000 sheep and lamb skins, 1,000,000 horse hides, 500,000 kangaroo skins and several million alligator and reptile skins.

Luggage producers estimated a drop of about 4 percent in volume for 1953. The decline was attributed to over-cautious buying during the last six months of the year reducing inventories during the peak selling periods.

Curbs on Hides, Skins Eased

Export controls in cattle hides and skins were relaxed in October by the Bureau of Foreign Commerce and shipments to most countries were permitted without applying for an individual export license. Individual export licenses, however, continued to be required for shipments to Hong Kong, Macao, and Soviet bloc countries, and no exports were permitted to China or North Korea. Shipments to other countries could be made under general license GRO, without prior application to BFC.

The relaxation, which applied to wet cattle hides (schedule B No. 020104), wet calf skins (B No. 020604), wet kip skins B No. 020704), and cattle hide parts (B No. 025098), was made possible by the large increase in US slaughter of beef cattle and calves and the availability of hides from other sources.

The year 1953 was one of mixed trends in the rayon and acetate producing industry, according to the Textile Economics Bureau. Shipments of rayon and acetate yarn and staple through July were close to the high levels established in the latter half of 1952, but in the succeeding months they declined noticeably. Stocks held by producers, which had been increasing since March, rose rapidly through the end of October, but declined substantially in November. Total shipments of rayon and acetate in the first eleven months of 1953 amounted to 1,092,300,000 pounds and production totaled 1,111,800,000 pounds. Producer's stocks at the end of November totaled 101,200,000 pounds, or 19,500,000 pounds more than the total at the close of 1952.

Trend of Textile & Leather Chemical Prices

100=1949 Average

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1953												
H.	102.12	102.09	102.09	102.09	102.11	101.16	99.99	99.57	98.54	98.73	98.73	98.71
L.	101.15	102.12	102.09	102.09	101.17	100.76	99.85	98.52	98.52	98.54	98.70	98.78
1952												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	104.94	99.34	98.87	87.00	91.83	105.99	106.80	104.48	104.09	104.10	101.24	101.16
L.	99.34	94.89	95.84	87.01	87.94	90.91	105.94	104.07	104.07	100.44	100.44	100.97

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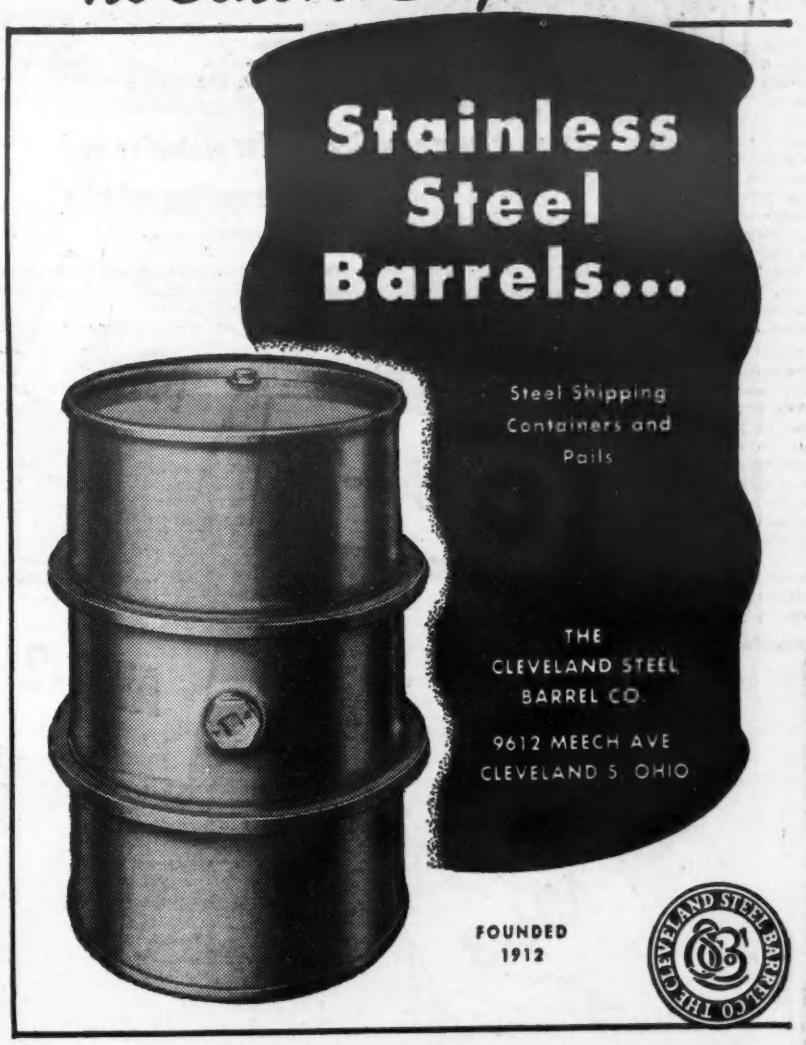

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Protective Coatings Materials

The year 1953, however it affected individual consumers or suppliers, was the seventh year in a row in which total paint, varnish, and lacquer factory shipments passed the one billion dollar mark. According to figures released by the Bureau of Census for the first ten months of last year, total factory shipments of paint, varnish and lacquer amounted to $1,236,824,000, a sum which surpasses by some $68,897 the previous all-time high for the period, which was set in 1952. Producers pointed out several reasons for the record year. One factor was felt to be the record building activity which took place last year. Another was the fact that increased purchasing power on the part of the homeowner resulted in a stepped-up trend to "do-it-yourself" in improving the condition of homes. Also pointed out were the introduction of newer type paints and improvements in older formulations, as well as acceptance by the homeowner of newer water resin emulsion type paints.

Scarcities Virtually Disappear

Another factor in increased sales last year was the virtual elimination of scarcity of material. As the year progressed, supplies of basic raw materials became more and more plentiful. With the Korean truce, supplies subject to government drain until that time eased considerably, although in a few isolated cases government demand kept materials scarce right up until the end of the year. The end of price control was seen in 1953, with some price increases in the forepart of the year as a result. However, supplies of many products increased to such an extent that toward the end of the year many prices were lowered, due to cheaper costs of basic raw materials.

Leads appeared to bear the brunt of price adjustments last year in the pigments group, due primarily to fluctuations in the metal market. Starting strong in January, monosilicate, red leads, litharge, and orange mineral rose ½c. per pound. Then the next week, lead blues and whites rose, while the other pigments declined fractionally. Later in the month, other fractional declines took place, with further reductions in February. Oxides gained and lost ½c. early in March, while litharge and orange mineral fell fractionally in April. Red lead and monosilicate declined further in late April, rallying early in May, and again late in that month.

Lead Pigments Swing Up in Price

The first of June witnessed a general upswing which became particularly strong toward the end of the month, fractional advances of ¾c. being noted. Not until late in July did the market show further activity, as oxides and monosilicate increased. Then in September, fractional reductions were made which stood for the rest of the year. Despite this almost continuous activity, especially during the first three quarters of the year, consumer demand continued strong and relatively steady. Industrial sales kept at high levels, and paint trade sales continued to be affected primarily by painting and non-painting seasons, as they always had. White lead, basic carbonate, for example, began the year at 16¼c. per pound, and finished at 16c. per pound, after adjustments had been made.

Zinc pigments, also dependent upon the metal market, similarly underwent many revisions in price last year. Early in January leaded oxides rose fractionally, and zinc dust declined. February saw a further decline in dust. Later in the month, leaded, lead free, and French process material all dropped fractionally. March activity included a further drop in the price of dust, and it was not until late April that another break occurred, leaded oxides again declining.

Leaded Zinc Oxides Rally

The market remained quiet until late June, when leaded oxides rallied, climbing from ¼c. to ⅜c. per pound, depending on lead percentage. The market remained quiet over the summer, with some downward revisions taking place in September. There was no change during the last quarter. Lead-free zinc oxide started the year at 14¼c., and finished at 13½c. per pound. Dust in January sold at 16½c., and in December at 13¼c. per pound. Despite these market fluctuations during the year, consumers took near record quantities of most zinc pigments.

Last year was more than satisfactory for titanium manufacturers. The huge quantities of material sold during the year served to point up the fact that titanium pigments were gradually replacing many other white pigments, particularly because of uses where superior hiding qualities are needed. One major producer of lithopone gave up manufacture of that item, while at the same time devoting more time and expense to the development of facilities for the manufacture of titanium pigments and metal. Inroads appeared to have been made on other pigments particularly for use in inside painting.

The market for titanium dioxide and calcium-rutile titanium pigment was characterized by strong demand, which prevailed until the last quarter. At that time, titanium dioxide was advanced 1½c. per pound, and calcium-rutile pigment was increased ⅜c. per pound. After this, buying interest was dampened somewhat, and did not return to normal until nearly the year's end. Nevertheless, inquiry remained at higher levels last year than at any previous time.

Other Dry Colors

While demand continued good for other dry colors, pricing revisions for any one color were less frequent. Early in January, bone black and red lithol toner increased, while dry and litho flushed blue alkali toners dropped. Later in the month, iron blues increased substantially, while antimony oxide was reduced. In February, nickel oxide rose 2 7/10c. Late in March, cadmium lithopone reds rose 7c. per pound, while nickel oxide once again increased. April witnessed an increase of 9c. per pound in AAOT benzidin yellows, a further rise of from 10c. to 20c for alkali blues, and another increase for iron blues.

At the same time, as spring contracts were issued, red para toner and toluidin toner increased, as well as CP chrome greens, red cadmium lithopones, and rhodamine red. Molybdate colors also were advanced from 20c. to 60c. per pound, depending on type. Later in the month came increases for several earth colors, including Indian and Venetian reds, and metallic oxide browns. Vandyke brown was decreased 1½c. Black, brown, red, and yellow synthetic iron oxide colors advanced, as did natural red iron oxide. Then ultramarine blues increased in May. No further activity took place until early in July, when some carbon blacks were advanced. In August, chromium oxide greens rose, and in September acetylene blacks were adjusted. Activity for the remainder of the year was confined to an increase of 20c. per pound for cobalt oxide late in October, and a decrease of 1½c. per pound for antimony oxide in the latter part of December.

No Pigment Price Activity in Oct.-Dec.

One indication of how the year went, as far as pigments are concerned, can be seen in the almost total lack of price activity in the final quarter, especially for the major items. Business was slow in getting started during the forepart of the year, due mainly to a delay in the painting season because of rainy weather. Business improved substantially when the painting season began, however, with consumers calling for large volume of all colors. The last quarter witnessed a tapering off in demand from the paint trade, while industrial demand held steady and strong until November, when slight declines were noted as manufacturers changed dies for 1954 production of automobiles, refrigerators, and other appliances.

Supplies of nearly all pigments increased during the year to the extent that most sources by the yearend reported comfortable supplies available for prompt shipment. Only one or two fairly tight spots were evident, one instance being a selenium shortage, which hampered manufacture of cadmium sulfoselenide reds.

In 1953, synthetic resins production and sales were at an all-time high. According to a report issued by the Society of the Plastics Industry, approximately 3,000,000,000 pounds of raw materials were produced. This approximation is 30 percent above the actual production of 2,333,924,000 pounds of synthetic resins in 1952. The 1953 value of all synthetic resins approximated $1,500,000,000.

The market situation among already well established resins during the year

Trend of Protective Coatings Material Prices

100=1949 Average

	1953 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	88.44	88.43	88.44	89.77	89.85	90.21	90.21	90.22	90.22	91.49	92.88	93.86
L.	88.44	88.43	88.43	89.60	89.78	89.85	90.21	90.21	90.22	90.21	91.49	92.85

	1952 Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	101.19	101.19	101.19	101.19	99.86	88.83	88.53	88.49	88.45	88.44	88.44	88.44
L.	101.19	101.19	101.19	101.19	88.83	87.51	88.49	88.43	88.44	88.43	88.43	88.44

was one of keen competition. Productive capacity for most resins more than kept pace with demand. Beginning in April, a labor dispute tied up one of the largest producers of phthalic anhydride and alkyd resins for nearly six months, with the result that supplies of some resins were brought into close balance with demand. However, with the end of the strike, it was evident to most observers that not only were resins in better supply, but phthalic anhydride was being produced in such quantities as to warrant a decrease in price. Late in the year declines of 2c. per pound were announced, and it looked to most sources as if resins using this material would reflect the decrease to some extent.

Ester Plasticizers

The year also witnessed good business for ester plasticizers. Not only did paint trade sales hold up better than expected, but industrial demand continued strong throughout the year. Material for use in the plastics industry was in extremely strong demand. Among lacquer materials, there was little activity during the first quarter. Then late in March, triphenyl phosphate was increased. It was not until late July that further activity took place, which included adjustments on dioctyl phthalate and di-iso-octyl adipate. Early in August dicapryl phthalate declined 2c. per pound. Late in the month producers began to pass on increased costs of drum packaging by revision drum differentials. This situation continued until the middle of December when on the 17th of the month, one producer initiated reductions which were to sweep the industry during the last few weeks of 1953. Dibutyl, di-isobutyl, dicapyrl, dioctyl, and di-iso-octyl phthalate were all cut 1c. per pound. Later, dioctyl and di-iso-octyl adipate were decreased ¼c. per pound in tankcars. The pricing situation remained unsettled at the year's end.

Natural Resins

Natural resins, fairly inactive during the first quarter, responded in April to the pressure of strong demand from Europe and Japan. This factor, combined with the weak position of buying interest in this country, caused upward and downward revisions, according to quantity, quality, and availability on spot. In May there were a few more revisions, and the market lapsed into quietude until late summer, when continued pressure from abroad made itself felt further on the domestic spot market. Advances for many grades of copal and dammar were noted in September, and from then until the end of the year the domestic market gained strength, primarily due to foreign demand. Domestic buying interest throughout the year was thought somewhat lower than at previous times, as consumers in part shifted interest from the natural resins to the synthetic resins. Esterified natural resins were a dull item most of the year. Increased prices toward the end of 1953 only served to point up the strong foreign influence on raw materials.

Shellac Market

The shellac market last year witnessed very little activity during the first quarter. Orange grades advanced in April, and for the remainder of the year the market firmed for orange grades. In October some declines were noted for the grades, but losses were regained in November. Then slight declines were noted for December.

What little price revision there was in the driers market was due to metals markets. In late April, lead driers declined, while in mid December, cobalt driers increased. Otherwise, the market was steady, with buyers making steady withdrawals. Fillers and inerts last year likewise saw few price changes. Some materials were increased in the spring, but for the most part, sales were made to generally good demand at stable prices.

Imported Casein in 1953

Imported Argentine casein fluctuated almost weekly all through the year, becoming particularly strong in this country during the summer. During the last quarter, however, domestic demand fell off to such an extent that distress material was offered for a time at from 8c. to 10c. below replacement cost. It was not until the year's end that the market revived sufficiently to record gains in price. Despite the miserable showing made during the last quarter, consuming demand took large amounts of material during the summer.

Naval stores, although fluctuating from week to week, wound up in roughly the same position, pricewise, at the end of last year. WW rosin began at $7.88 per drum equivalent, and ended the year at $8.10 per pound, same basis. Turpentine at Savannnah in 1952 sold at 53½c. per gallon, and at the end of 1953, was offered at 52¾c. per gallon.

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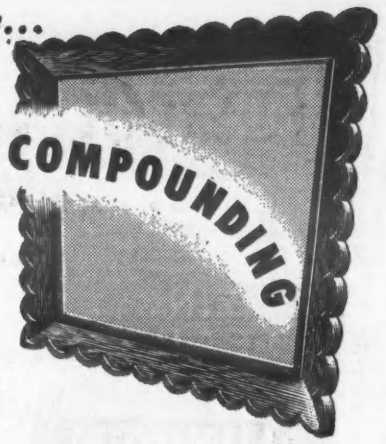

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Chemical Plant Expansion Seen Top '53 Event

—*Continued from page 3*

Shell Chemical Corporation opened its $10,000,000 plant at Ventura, Calif. In November the American Cyanamid Company revealed plans to double the capacity of its plant at Fortier, near New Orleans, La., bringing it to more than 300 tons per day.

National Distillers Products Company in June, scheduled plans for a $7,000,000 plant at Tuscola, Ill., to have a capacity of 50,000 tons per year. Early in the year, Brea Chemicals, Inc., a subsidiary of Union Oil Company, completed plans for a $13,000,000 plant at Brea, Calif., with a designed capacity of 200 tons per day. At midyear Commercial Solvents Corporation started production in its 70,000 ton per year plant at Sterlington, La.

In August Pennsylvania Salt Manufacturing Company, announced plans to construct a plant at Wyandotte, Mich. In the same month, Columbia-Southern Chemical Corporation began construction of a plant at Natrium, W. Va. Chillicothe Chemical Manufacturing Company in December revealed plans for the construction of a $17,000,000 plant near Chillicothe, Tex.

Ammonium Nitrate—Commercial Solvents Corporation announced plans in February for a plant to produce this item at Sterlington, La.

Antibiotics—Venezuelan scientists in February announced the discovery of a new antibiotic, mycobacidin, said to be effective against tuberculosis and leprosy. At midyear, E. R. Squibb & Sons, Division of Mathieson Chemical Company, told of plans to build a $1,400,000 plant at Sao Paulo, Brazil, for the manufacture of penicillin. The discovery of fumidil was announced in February by Abbott Laboratories, North Chicago, Ill. Candicidin, a new tuberculosis antibiotic, was discovered at Rutgers University and announced in February. Another anti-tuberculosis antibiotic also announced in February was amicetin.

A new type of penicillin designed to eliminate allergic reactions to this antibiotic, was developed by the Upjohn Company. In September, Chas. Pfizer & Co., Lederle Laboratories and Heyden Chemical Corporation announced the synthesis of tetracyline, and Bristol Myers Company developed a new fermentation process for tetracyline manufacture. Heyden's antibiotic division was bought in November by the American Cyanamid Company. A plant disease control antibiotic, oligomycin, was discovered at the University of Wisconsin. University of Wisconsin extracted and purified ursolic acid, a drug obtained from cranberries, which prolongs the effect of penicillin, both as the acid and as its amine. In November Lederle Laboratories put "Achromycin" on the market; it is an antibiotic useful in treating a wide range of infections.

Antioxidants—To prevent rancidity in animal and vegetable oils used in foodstuffs, Eastman Chemical Products Company developed and at the yearend marketed "Tenox BHA"—butylated hydroxy anisole.

Aromatic solvents—In March Shell Chemical Corporation put on stream its integrated platforming plant at Houston, Tex., having an annual capacity of 19,000,000 gallons of benzol and 33,000,000 of toluol. In December Sun Oil Company opened its $15,000,000 plant at Marcus Hook, Pa., having a yearly capacity of 19,000,000 gallons of benzol, 19,000,000 gallons of toluol and 15,000,000 gallons of xylol.

Atomic energy—Commercial Solvents Corporation in March started operation of their new 63-inch cyclotron at Oak Ridge, Tenn. This is the first cyclotron designed to accelerate heavy atomic particles. In April a uranium rich mineral deposit was discovered near Marysville, Utah. In May Westinghouse Electric & Manufacturing Company announced plans to build a plant north of Pittsburgh, Pa.

During the year the first successful breeder reactor was developed and found practical. It generates more nuclear energy than it consumes. Several major industrial firms initiated studies on the private application of atomic energy to industry. A contemplated Atomic Energy Commission $26,000,000 plant at Spoon River, Ill., announced in February, was cancelled in November.

Meanwhile, research at Columbia and Stanford Universities indicated that the atomic nucleus is not a solid uniformly packed thing, but is more dense at the center than around the edges. Official disclosure was made that present nuclear fission bombs are twenty-five times more powerful than the first one exploded, which was equivalent to 20,000 tons of TNT, and that hydrogen bombs are equivalent to a million tons of TNT.

Calcium carbide—Midwest Carbide Company in March reported plans to build a $3,000,000 plant near Pryor, Okla.

Cancer—In the laboratory, chemicals have been deevloped which will kill cancer cells without harming normal body cells, but 1953 did not see this development sufficiently tested on a clinical scale for conclusive results.

Caprolactone—A plant to make this nylon raw material at Morgantown, W. Va., was planned in March by Mathieson Chemical Corporation and American Enka Corporation.

Carbon black—Continental Blacks, Inc., was formed by Continental Oil Company and Shamrock Oil & Gas Company to build a $2,500,000 plant for the annual production of 40,000,000 pounds of high abrasion carbon. Cabot Carbon of Canada, Ltd., opened its $3,000,000 plant at Sarnia, Ont., having a furnace black capacity of 25,000,000 pounds per year.

Catalysts—Baker & Co. announced plans in July for the construction of a $2,200,000 plant at Newark, N. J., and in April Davison Chemical Corporation opened its $7,000,000 petroleum cracking catalyst plant at Lake Charles, La.

Chlorinated methanes—Solvay Process Division of Allied Chemical & Dye Corporation disclosed plans in June for the construction of a $2,000,000 plant at Moundsville, W. Va., for the manufacture of methyl chloride, methylene chloride, chloroform and carbon tetrachloride.

Chlorine and caustic soda—Velsicol Corporation completed in July its $2,900,000 plant, having a capacity of 100,000 pounds of caustic and 88,000 pounds of chlorine per day. In August, Pennsylvania Salt Manufacturing Company started production of chlorine at its new Calvert City, Ky., plant. Wyandotte Chemicals Corporation went into production in October with its 300 ton per day chlorine unit.

In December Canada's first plant started production. The plant built at Duvernay, near Alberta, by Western Chemicals, Ltd., cost $3,500,000 and has a capacity of ten tons of chlorine, ten tons of caustic, and ten tons of hydrochloric acid per day. Also in December Solvay Process Division started its new plant at Moundsville, W. Va.

Chlorophyll—Estimated 1953 consumption of this item was set at 40,000 pounds, as against 100,000 pounds in 1952.

Cryolite—Plans were announced in May by the Aluminum Company of America for the construction of a $2,500,000 plant, the location of which was not determined at that time.

Drugs—In August an announcement was made by the American Medical Association of the discovery of levarterenol, effective in curbing conditions of acute shock, by raising the blood pressure from the shock state to normal. Oregon State College announced that influenza virus growth had been stopped by the use of isopropyl biguanide hydrochloride, and by benzoyl guanylurea.

Dyestuffs—Ciba Company in June opened its new $18,000,000 plant at Toms River, N. J., having an annual capacity of 4,000,000 pounds of vat dyes.

Fertilizer—In January Davison Chemical Corporation announced plans for a $1,000,000 plant to be constructed at New Albany, Ind. American Agricultural Chemical Company in August revealed it intended to build a plant at Cairo, Ohio. The Nitrogen Division of Allied Chemical & Dye Corporation reported plans in September for a new $5,000,000 plant at South Point, Ohio, for the manufacture of their "Arcadian 12-12-12" fertilizer, and an additional $7,000,000 project at Hopewell, Va., was announced in November. Chemists of the Tennessee Valley Authority announced the development of a new fertilizer made from air, phosphorous and ammonia, said to provide more than twice the plant nourishment than is offered by present fertilizer mixtures.

Formaldehyde—Plans were revealed in February for construction of a $1,200,000 unit at Belvidere, N. J., by Celanese Corporation of America. A plant at Varennes, Que., Canada, was opened in September by the St. Maurice Chemicals, Ltd., jointly owned by Heyden Chemical Corporation and Shawinigan Chemicals, Ltd. This plant has a capacity of 30,000,000 pounds of formaldehyde and 3,000,000 pounds of pentaerythritol per year.

Glycerin—In July Dow Chemical Company revealed plans for the construction of a synthetic plant at Freeport, Tex., and in August Shell Chemical Corporation started construction of a new plant at Norco, La.

Hexamine—In October Mathieson Chemical Corporation began operation of its new plant at Morgantown, W. Va.

Herbicides—At the end of July, General Chemical Division of Allied Chemical & Dye Corporation announced the marketing of its new herbicide under the trade name of "Urab."

Hormones—In August, Monsanto Chemical Company announced a new method of production, in fewer steps and from abundant raw materials, of cortisone type hormones. Also in August, both Swiss and British scientists isolated in pure crystalline form the adrenal hormone which controls utilization by the body of minerals essential to life. The hormone was named electrocortin.

In September the Upjohn Company expanded its production faciilties for the manufacture of cortisone. Armour Laboratories in November opened its new $12,000,000 plant at Kankakee, Ill., for the production of ACTH and other pharmaceutical materials. In October, Cornell University announced the successful synthesis of oxytocin, the post-pituitary hormone that contracts the uterus and starts milk flow after childbirth.

Hydrazine — Matholin Corporation, jointly owned by Mathieson Chemical Corporation and Olin Industries, Inc., completed a $3,000,000 plant built at Lake Charles, La.

Hydrochloric acid—The plant built at Carlsbad, N. Mex., by International Minerals & Chemical Corporation, was completed in May.

Hyrogen peroxide—E. I. duPont de Nemours & Co. started shipping hydrogen peroxide in August from its new Memphis, Tenn., plant, which employs a new non-electrolytic manufacturing process.

Insecticides—Tennessee Products & Chemical Corporation made a February announcement of a plant to build a $2,500,000 plant at Chattanooga, Tenn., for the production of insecticides and ferro-manganese. Northeastern Chemical Company reported plans to construct a plant at Westbrook, Me., having a daily capacity of twenty tons of dry products and 5,000 gallons of liquid products.

Isocyanates — Monsanto Chemical Company announced plans in April for the construction of a multimillion dollar plant for the production of various isocyanates.

Isophthalic acid—For the production of this chemical, Ornite Chemical Company, San Francisco, Calif., announced plans for the construction of a multimillion dollar plant.

Lithium chemicals—Foote Mineral Company opened its Sunbright, Va., plant in April and was under full-scale hydroxide production by the end September, with production of other lithium salts planned in the immediate future.

Magnesium oxide—The plant of International Minerals & Chemical Corporation, was completed at Carlsbad, N. Mex., in May.

Methanol—Commercial Solvents Corporation started production at its 15,000,000 gallon per year plant in Sterlington, La. Monsanto Chem-

ical Company and Heyden Chemical Corporation announced plans in January to build a 25,000,000 gallon plant at Texas City, Tex.

Methionine—At a plant site near Beaumont, Tex., E. I. duPont de Nemours & Co. said in January it was going to build a $4,000,000 plant.

Methylenechlorobromide—Announcement was made in August of the marketing of this fire extinguisher liquid by the Eston Chemical Division of American Potash and Chemical Corporation.

Nickel—In April, a large deposit of some 40,000,000 tons of ore was found in Moa Bay, Cuba, averaging 1.35 percent nickel and 0.14 percent cobalt.

Nickel sulphate—A, 4,000,000 pound per year plant was completed in November by Republic Chemical Corporation at Curtis Bay, Md.

Nitrogen products—Plans were announced in May for a $16,800,000 plant to be built by Monsanto Chemical Company at Texas City, Tex., for the manufacture of acrylonitrile and other nitrogen products.

Oxygen—In February Air Reduction Company completed its multimillion dollar plant at Butler, Pa., having a capacity of 100 tons of liquid oxygen per day.

Pentachlorophenol—Hercules Powder Company revealed plans in June to expand its plant facilities at Mansfield, Mass., which expansion would give it an additional 1,000,000 pounds per year.

Pentaerythritol — In February, Delaware Chemical Company announced plans to build a $1,000,000 plant in northern New Jersey. Canadian Chemical Company, Ltd., Edmonton, Canada, affiliate of Celanese Corporation of America, constructed a 15,000,000 pound per year plant. (See also **Formaldehyde.**)

Petrochemicals (not mentioned elsewhere)—In November National Petrochemicals Corporation, jointly owned by National Distillers Products Company and Panhandle Eastern Pipe Line Co., dedicated its new $50,000,000 plant at Tuscola, Ill. Among the products of this plant will be a rated capacity of 40,000,000 gallons of ethyl alcohol and 50,000,000 pounds of ethyl chloride. In February Mathieson Chemical Corporation and Mississippi River Fuel Company formed the Mathieson Mississippi Company to develop chemical processes using natural gas as the raw material. Commercial Solvents Corporation told of plans to build a $2,951,300 plant at South Charleston, W. Va.

Phenol—In November Monsanto Chemical Company put its new plant at Avon, Calif., in operation. In May, B. A. Shawinigan, Ltd., opened its plant at Montreal to produce phenol by the cumene oxidation process. The plant has a yearly capacity of 13,000,000 pounds of phenol and 8,000,000 pounds of acetone. This same process is to be used in certain American plants, such as the Hercules Powder Company plant started in 1953 at an estimated cost of $8,500,000 and having a capacity of 26,000,000 pounds of phenol per year.

Phosphates—Virginia-Carolina Chemical Corporation announced plans in July to construct a new unit at Fernald, Ohio, for phosphoric acid and various sodium phosphates. At Columbia, Tenn., Shea Chemical Corporation began operating a new elemental phosphorus furnace, with a rated capacity of 40,000,000 pounds of white phosphorus per year. Near Mulberry, Fla., F. S. Royster Grano Company revealed plans in March for a $3,000,000 superphosphate plant.

In May, American Cyanamid Company received a certificate of necessity for $872,800 for phosphate rock development' Dominion Tar & Chemicals, Ltd., told of plans in May to build Canada's first tricresyl phosphate plant at Montreal. At its Idaho plant Monsanto Chemical Company during August installed a second electroyltic furnace for elemental phosphorus manufacture. In October, Victor Chemical Works began an expansion program at its Morrisville, Pa., plant which will double its output of phosphorus oxychloride and of phosphorus trichloride.

October also saw the beginning of the operation of a $9,000,000 plant by Consolidated Mining & Smelting Company of Canada at Kimberly, B. C., having a capacity of 190 tons per day of ammonium phosphate. Monsanto Chemical Company boosted its production of dicalcium phosphate at St. Louis, Mo., at the yearend. Davison Chemical Corporation partially completed its $12,600,000 triple superphosphate plant at Bartow, Fla.

Plastics and resins—In January the Dow Chemical Company plant at Torrence, Calif., started production of polystyrene. High impact polystyrene production by the Springfield, Mass., plant of the Monsanto Chemical Company was expanded in midyear to a capacity of 30,000,000 pounds per year. The greatest plastics expansions during the year occurred in polyethylene.

Bakelite Company, a division of Union Carbide & Carbon Corporation, in May announced plans for three plants, each at a rated annual capacity of 60,000,000 pounds. These plants to be located at Texas City, Tex., Seadrift, Tex., and Torrence, Calif. In December, the Texas City, Tex., plant started operations. Spencer Chemical Company in February announced plans for a multimillion dollar plant at Orange, Tex., designed to have a capacity of 45,000,000 pounds. Monsanto Chemical Company in March announced plans to enter the polyethylene field by 1955 with a plant having an annual capacity of 66,000,000 pounds. In November the site of this plant had been selected at Texas City, Tex.

Canadian Industries, Ltd., in January opened its $13,000,000 plant at Edmonton, Alberta, Canada. In April announcement was made of Eastman Kodak Company's intention to build a multimillion dollar plant at Longview, Tex., with a capacity of 20,000,000 pounds per year. Plans were revealed by the General Tire & Rubber Company in April for a new $6,000,000 plant which will include polyvinyl chloride among items produced. Celanese Corporation of America in May bought the polyester resin plant of Marco Chemicals, Inc., Linden, N. J.

Some 64,000,000 pounds of molding resins are expected to be produced in the plant which Durez Plastics & Chemicals, Inc., is constructing at Kenton, Ohio. In February, E. I. duPont de Nemours & Co. started construction of a $10,000,000 plant for plastic manufacture at Circleville, Ohio. A certificate of necessity was granted for a plastics plant costing $451,773 to Plastics Engineering Company, Sheboygan, Wis.

Potassium carbonate—Announcement was made in May by the Solvay Process Division of Allied Chemical & Dye Corporation for a $2,000,000 plant at Solvay, N. Y.

Refrigerants—Plans of the General Chemical Division of Allied Chemical & Dye Corporation were revealed in November to triple its production facilities at Baton Rouge, La., for the production of dichlorodifluoromethane and trichloromonofluoromethane. E. I. duPont de Nemours & Co. spent $2,000,000 at midyear to expand "Freon" output at its Deepwater, N. J., and Chicago, Ill., plants.

Silicones—In July Linde Air Products Compand announced plans to build a $13,000,000 plant near Long Beach, Tyler County, W. Va.

Sodium silicate—Announcement of a 300 ton per day plant at Lake Charles, La., was made in January by Davison Chemical Corporation.

Solar energy—Announcement was made during the year by Lawrence J. Heidt of Massachusetts Institute of Technology of a potential closed power cycle energized by solar energy. By use of catalysts and solar energy, water is decomposed into hydrogen and oxygen, which may in turn be subjected to combustion to provide heat and power.

Sorbic acid—Union Carbide & Carbon Corporation announced it was considering a plant to manufacture this anti-mould agent for foodstuffs.

Sucrose—Of no commercial significance, the synthesis of sucrose has long been a technical challenge to organic chemists. National Research Council of Canada accomplished the feat in 1953 by the action of a fructose with Bregl's anhydride.

Sulphur—Standard Sulphur Company began operations in December with a new $450,000 mobile 200 tons per day extraction unit employing the Frasch process near Damon, Tex. A 100 ton per day plant costing $1,000,000 was announced in March by American Sulphur & Refining Company to be located at Fillmore, Calif. Freeport Sulphur Company in November opened a mine with an annual output of 500,000 tons in the dome deposit beneath Garden Island Bay on the Mississippi delta. Stauffer Chemical Company in October reported building a $1,000,000 plant at Monongahela, Pa., for the manufacture of insoluble sulphur.

Reports were issued in November of the intention of Texas International Sulphur Company to build a plant near San Felipe, Mex., to extract Sefron ore deposits. Mexican Sulphur Company, a subsidiary of Mexican Gulf Sulphur Company, was in production at yearend with a $6,000,000 plant of 200,000 tons per year capacity, at San Cristobal, Vera Cruz.

Sulphuric acid—In April International Process Company introduced the Kacharoff-Guareschi process to the United States. Announcement of a new plant at Baton Rouge, La., was made in May by the General Chemical Division of Allied Chemical & Dye Corporation, and the construction of another plant at Painesville, Ohio, the latter plant to cost $3,300,000. This company also expanded production facilities at River Rouge, Mich. In December Davison Chemical Corporation opened its acid plant at Bartow, Fla., as the first step in its new $12,000,000 triple superphosphate plant.

Synthetic resins—In July Reichhold Chemicals, Inc., revealed plans to construct a plant at Kansas City, Kans., for the production of polyester, phenolic and urea-formaldehyde resins. Barrett Division of Allied Chemical & Dye Corporation expanded its synthetic resin interests during the year by buying the Plaskon Division of Libby-Owens-Ford Glass Company and the Synbar Southern Corporation's plant at Greensboro, N. C. An increased output of epoxy resins was expected to result from plant construction started by Shell Chemical Corporation in August. In September Reichhold Chemicals, Inc., announced the first water soluble synthetic phenolic resinous vehicle for protective coatings.

Tall oil—Newport Industries, Inc., started construction in March on a new $2,700,000 plant at Bay Minette, Ala.

Tar products—The new plant of Koppers Company at Fontana, Calif., was dedicated in February.

Titanium—A dioxide plant costing some $14,000,000 near Savannah, Ga., was planned by American Cyanamid Company at midyear. A metal plant costing $25,000,000 was planned by Cramet, Inc., in September to be located at Chattanooga, Tenn. A $3,000,000 plant designed to produce 100,000 tons of metal per year was schedled for early 1955 by E. I. duPont de Nemours & Co. A plant capable of producing 6,000 tons of sponge metal was announced November 16 by Bitro Corporation of America, to be constructed at Chattanooga, Tenn.

Vaccines—A vaccine felt to be effective in the prevention of all types of polio was developed by Dr. Jonas E. Salk of the University of Pittsburgh, and will be mass tested on 500,000 children in 1954. Sharp and Dohme Division of Merck & Co. developed a whooping cough vaccine using the unusual method of disintegrating whooping cough germs with high frequency sound waves.

Vinyl toluene—By December the Dow Chemical Company plant for making this item was in full-scale production at Midland, Mich.

Zinc—The world's largest electric induction furnace, having a capacity of 300 tons per day, was opened at Trail, B. C., by Consolidated Mining & Smelting Company of Canada, in September. The New Jersey Zinc Company in November bought the Arminus mine at Mineral, Va.

Chats about Finishes

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by

J. M. SCHANTZ

Manager, Technical Service
Hercules Naval Stores Dept.

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Oils, Fats and Waxes

Price trend for oils and fats in 1953 was materially lower for most fats, especially for crude vegetable oils such as corn, cottonseed, peanut and soybean. The biggest drop in this group occurred in peanut oil, which was 9c. per pound lower at the end of 1953 than the previous year. Industrial oils also were easier, with sharp declines taking place, led by oiticica, 10c. per pound; dehydrated castor, 9c. per pound; tung, 5c. per pound, while linseed oil was only 1c. per pound lower.

Consumers continued to restrict purchases, chiefly for prompt requirements and with most orders booked for delivery within thirty days. The volume of business during the year, however, was reported from fair to good, despite the cautious buying on the part of consumers during the year.

Tallow and Syndets

Tallow continued to feel the increased use of synthetic detergents. Market was weak during the greater part of the year and bleachable fancy ranged from 4¼c. to 4¾c., tankcars, delivered, until October, when improved export business stiffened prices and bleachable advanced steadily to 7c. at the end of the year. Other tallow grades and greases followed suit. Many rendering plants closed during midyear because of low prices for tallow and greases which precluded any profit in operating. Most of the shutdowns were located in rural areas. Sales of synthetic detergents in 1953 increased about 25 percent above 1952 and for the first time exceeded soaps, which declined approximately 10 percent.

Lard market staged a comeback during the second half of the year, after ruling weak during the first half, reaching the low in February and June, when cash lard was moved at 8¾c. per pound, drums, Chicago. Starting in the latter part of August, the market surged upward under increased trade and government buying for export and cash lard touched the high of 20.60c. per pound in September and ranged from 17c. to 19c. during the balance of the year.

Key High-Low Prices of '53

The following table indicates the high and low prices for 1953 and on December 31, 1953, per pound, in tankcars, New York basis, unless otherwise specified:—

	High	Low	Dec. 31, 1953
Oils:—			
Castor, dehyd., bodied...	$0.3110	$0.2260	$0.2260
tech., No. 3.....	.25¾	.16¾	.16¾
Coconut, crude, Pac. coast	.20¾	.13¾	.16½
Corn, crude, mills.....	.15⅛	.13⅜	.13⅜
Cottonseed, crude, Southeast	.15¼	.12¾	.12¾
Linseed, raw, Minneapolis	.1620	.1320	.1500
Menhaden, crude, works.	.07½	.06	.07¼
ref., light pressed.....	.11½	.10	.11½
Oiticica, drums.....	.25	.16¾	.16¾
Oleic acid, single dist., bgs.	.12	.10¼	.12
Oleo, tcs.	.19	.10½	.18⅝
Olive, edible, dms., gal...	$2.75	$2.30	$2.30
Palm, dms.....	.1270	.11½	.12½
Peanut, crude, mills.....	.26½	.16¼	.16¼
Rapeseed, ref.	.17¼	.16¼	.16¼
Sardine, crude, Pac. Coast	No stocks		.....
Soybean, crude, mills....	.13¾	.10	.12⅜
Tung, imported.....	.31½	.23½	.23½
dom., mills.....	.29¼	.24½	.25
Miscellaneous—			
Copra, Pac. Coast, ton..	$260.00	$177.50	$220.00
Cottonseed meal, mills, ton	$78.00	$55.00	$65.00
Grease, yellow.....	.05¾	.03¼	.05¾
Lard, trcs., Chicago.....	.2060	.08¾	.17¼ N
Linseed meal, exp., Minn.	$80.00	$58.50	$72.00
Stearic acid, single pressed, bgs.....	.12¼	.10½	.12¼
Soybean meal, Decatur, ton	$71.50	$56.00	$71.50
Tallow, fancy, dlvd.....	.07	.04⅛	.07
Wax, carnauba No. 3, crude, bags.....	$1.14	.87	.87
No. 1, yellow, Ceara, bags	$1.38	$1.18	$1.19

Futures Trading Limits

The Commodity Exchange Authority established limits on position and daily trading of cottonseed oil, soybean oil and lard for speculative accounts to be effective on and after April 1, 1953. The limit for any one future or all future combined in cottonseed oil was placed at 3,600,000 pounds (sixty contracts); soybean oil 3,000,000 pounds (fifty contracts); and lard 1,600,000 pounds (forty contracts). The action was taken, it was stated by CEA, to prevent excessive speculation in futures which will cause sudden, unreasonable or unwarranted fluctuations in prices.

Also the commission, effective November 15, raised the limit on daily speculative soybeans futures trading from 1,000,000 to 2,000,000 bushels. The increase was recommended in view of the sustained volume of trading during the past two years and the increasing importance of the futures market in the marketing and processing of beans.

Cottonseed Oil Futures

Trading in bleachable cottonseed oil futures during 1953 continued to reflect the absence of outside speculative support and smaller hedging operations than usual due to the cottonseed support program. Commodity Credit Corporation absorbed the bulk of production of crude oil as the season progressed. On September 1, CCC modified its selling price of refined cottonseed oil and offered domestic consumers oil at the prevailing market price, but not less than the minimum crude oil price of 14c. per pound, plus refining cost and quality in tankcars, or tank wagons, f.o.b. storage points. Previously the agency maintained 17¾c. or market price whichever was higher. In December, CCC increased its selling price of crude 1c. to 15c. per pound, tankcars, f.o.b. mills and stated that prices of crude and refined cottonseed oils would not be reduced before September 1, 1954. The agency also withdrew offers of cottonseed meal because its stocks had been sold for drought relief and the Department of Agriculture announced a plan to substitute government-owned wheat and corn at reduced prices instead of cottonseed products.

Crude cottonseed oil tendered to the CCC from the 1953 crop up to January 6 totaled about 230,000,000 pounds, at 75 percent of parity compared to 377,400,000 pounds during the same period from the 1952 crop at 90 percent of parity. Cottonseed meal tenders from the 1953 crop amounted to 331,742 tons, about 105,350 tons of which was for future delivery. Of the 211,390 tons delivered, 66,870 tons were to be re-sold to crushing mills, while practically all of the remainder was sold for drought relief at reduced prices.

USDA Cotton Oil Purchases

In July, the Department of Agriculture announced terms and conditions under which it would purchase cottonseed oil, cake or meal and linters from crushers under the 1953 cottonseed price program. Crushers had to pay to participating ginners not less than $54.50 per ton for basis grade (100) cottonseed f.o.b. gin point, with specified premiums and discounts for other grades. For each ton of eligible cottonseed purchased by a crusher, Commodity Credit Corporation offered to buy the following quantities of crude cottonseed oil, 14 percent protein sized cake or meal, and linters as a combination "package"in the specified areas:—

	Oil Lbs.	41% Protein Cake or Meal Lbs.	Linters Lbs.
Southeastern	308	870	192
Valley	324	865	179
Texas-Oklahoma	313	948	176
Arizona-New Mexico..	336	873	182
California	339	922	202

Oil—For prime crude cottonseed oil the base price per pound, basis f.o.b. buyer's tank cars at crusher's mill:—Southeastern, 12.875 cents; Valley, 12.75 cents; Texas-Oklahoma, 12.5 cents; Arizona-New Mexico, 12.5 cents, and California, 12.5 cents.

Cake or Meal—41 percent minimum protein content, basic hydraulic or expeller bulk meal or sized cake f.o.b. seller's cars at crushing plant:—Southeastern, 2.825 cents; Valley, 2.725 cents; Texas-Oklahoma, 2.725 cents; Arizona-New Mexico, 2.675 cents, and California, 2.675 cents.

Linters— For mill run linters sold on a cellulose basis or second cut chemical linters, the price was 3.50 cents per pound gross weight basis 73 percent cellulose yield with premiums and discounts of .05 cent per pound for each variation on 1 percent, fractions in proportion, of cellulose yield from 73 percent.

The Department of Agriculture announced in September that CCC had discontinued its sales of cotton linters in order to allow new crop linters to move freely into normal trade channels and to prevent excessive deliveries of linters to the agency under the 1953 cottonseed purchase program. The above did not apply to cottonseed crushers who made conditional tenders of cottonseed products to CCC under the 1953 program, and they were permitted to repurchase any or all linters tendered.

Cottonseed production in 1953 was estimated at 6,718,000 tons as of December 1 by the Department of Agricultre, about 7

Trend of Oil, Fats & Waxes Prices
100=1949 Average

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct	Nov.	Dec.
1953												
H.	107.75	105.31	103.42	99.73	94.81	93.70	91.89	93.01	92.68	92.68	97.31	102.97
L.	106.17	103.12	99.73	94.13	93.70	91.78	91.76	90.67	91.35	91.53	90.91	101.40
1952												
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
H.	122.28	115.84	112.11	96.95	100.55	104.57	102.29	104.00	109.30	117.07	119.70	113.13
L.	118.78	113.94	103.95	94.41	95.30	104.47	101.00	103.46	105.70	109.92	115.16	107.75

percent higher than a year earlier. The 1952 output totaled 6,190,000 tons and the 1942-51 average was 4,955,000 tons. Cotton crop for 1953 was forecast by the department at 16,437,000 bales as of December against final 1952 production of 15,139,000 bales and 1942-51 average of 12,215,000 bales.

Soybeans crop was estimated at 262,341,000 bushels as of December 1 by the Department of Agriculture. This compared with production of 298,052,000 bushels in 1952 and the 1942-51 average of 219,596,000 bushels. Acreage harvested totaled 14,366,000, against 14,338,000 in 1952 and the ten-year average of 11,114,000 acres. Yield per acre was indicated at 1.42 bushels, against 1.40 in 1952 and the ten-year average of 1.37 bushels.

Soybean Oil Price Shifts

Prices of crude soybean oil fluctuated widely during 1953, reaching the high of 13⅞c. per pound, tankcars, Decatur, in early April, the low of 10c. in mid-July and ending the year at 12¾c., same basis. The high cost of soybeans and low prices for oil and meal cut production materially early in 1953 as processors were operating at a loss. A number of small processors shut down plants while most large producers operated below capacity.

Flaxseed crop for 1953 was estimated at 38,314,000 bushels, compared with 30,174,000 bushels in 1952 and the 1942-51 average of 38,312,000 bushels. Acreage harvested totaled 4,380,000 acres, against 33,303,000 in 1952 and the 1942-51 average of 4,107,000. Yield per acre was 8.4 bushels, compared with 9.1 bushels in 1952, and the ten-year average of 9.3 bushels.

In June, the President issued a proclamation providing for an additional duty of 50 percent on imports of flaxseed and linseed oil. Some linseed oil crushers signed an agreement with the Commodity Credit Corporation in September for toll-crushing government owned flaxseed. CCC sold the seed to crushers for about $4 per bushel under the crushing plan, who sold the oil back to government at a negotiated price and kept the meal for sale.

Flaxseed '54 Support Price

Lower support price for 1954 crop flaxseed was announced by the Agriculture Department in October. The price set for the 1954 crop was cut to $3.14 per bushel, equivalent to 70 percent of parity, September 15, 1953, against $3.79 per bushel for the 1953 crop, reflecting 80 percent of parity in August, 1952. As in previous years, support for 1954 flaxseed crop will be carried out in most areas through warehouse and farm storage loans and through purchase agreements, but in Texas counties where flaxseed is normally storable for only a short period of time, prices will be supported if necessary by direct purchase only.

Minimum price support levels for types of peanuts and areas for the 1953 crop was announced by the Department of Agriculture as follows:—Virginias, $229 per ton, containing 65 percent sound mature kernels; Runners, $213 per ton, same basis; Spanish, $234 per ton, east of the Mississippi river containing 70 percent sound mature kernels and $230 per ton, west of the Mississippi; Valencias, the same support price as for the Virginia type. Support prices were based on an average price of not less than $237.60 per ton, and will be increased if 90 percent of parity at the beginning of the marketing year (August 1) exceeds that figure. The final average support price for 1952 crop was $239.40 per ton.

Peanut Marketing Quotas to '56

Peanut growers approved the use of marketing quotas for the peanut crops to be produced in 1954, 1955 and 1956 in the referendum held by the Department of Agriculture December 15. Unofficial tabulations of the returns showed 94.3 percent of the voting growers approved the marketing quota system.

Olive oil production in the Mediterranean Basin in 1953 was expected to be up 50 percent from 1952, according to the Foreign Agricultural Service. Preliminary estimate indicated a total output of 1,148,000 short tons compared with 751,200 tons in 1952 and a record high of 1,606,700 tons in 1951.

Imports of tung oil and tung nuts were placed under a quota of 2,000,000 pounds of oil or oil equivalent of tung nuts, during the period from April 8 to June 30, plus any quantities of oil in transit to the United States prior to April 8. This action was to prevent unnecessary expenditures under the price support program for domestic tung nuts and the interference with the orderly marketing of domestic oil. However, prices of tung oil declined steadily during 1953 from 31½c. per pound, tankcars, New York basis in early January down to 23½c. at the close of the year.

Department of Agriculture announced that through June 30, the closing date of price support availablity for 1952-crop tung oil, 6,766,429 pounds were placed under CCC loans, and 2,470,609 pounds under purchase agreement, a total of 9,237,038 pounds. Support prices to growers of 1953 tung nuts were set at not less than $63.38 per ton, basis 18½ percent oil content and grower owned tung oil at 23.9c. per pound by the CCC. These prices reflected 65 percent of the parity price of $97.50 per ton, mid-September. The 1952 crop was supported at $67.20 per ton for tung nuts and 26.5c. per pound for tung oil, which were 62.2 percent of parity.

Castor Beans Situation Detailed

Castor beans produced this year in Arizona, Arkansas, California, New Mexico, Oklahoma and Texas will be purchased by the Department of Agriculture. CCC will pay growers 6c. per pound for hulled beans, delivered to approved warehouses. The 1953 program included contracts with producers and private companies at 9c. per pound. The price for 1954 beans was reduced because of the lower bean market.

World production of castor beans in 1953 is expected to be virtually equal to the record 547,000 tons produced in 1948, according to preliminary estimates of the Foreign Agricultural Service. The agency estimated the production at 546,000 tons, an increase of 8 percent over 1952 production of 506,000 tons, and 15 percent above the prewar average.

The estimated expansion of 40,000 tons from 1952 took place in Brazil, India, and the United States, and in the Union of South Africa, normally a minor producing country. No allowance has been made for any increase in the Soviet Union, which probably ranks third as a world producer, or for Manchuria, which may hold fourth place.

Roughly 60 to 70 percent of the estimated world production of castor beans originates in Brazil and India. On the basis of reported statistics, Brazil is the major producer. However, the production reported for India's major producing states covers only castor beans grown alone and not the considerable acreage sown mixed with other crops. Reliable data are not available for this interplanted portion. On the basis of the estimated quantity of castor oil produced, it is believed that total Indian production of castor beans actually may be twice the volume of the reported pure crop. This quantity of production would place India first as a producer and Brazil second.

Fish Oil Exports

Exports of domestic fish oils during the period January-October, 1953, inclusive, totaled 43,373 short tons, or more than three times the quantity exported during the corresponding period of 1952 and 14 percent above the previous record exports of 37,987 tons for the twelve months of 1952, according to the Foreign Agricultural Service.

A sharp rise in shipments to western Germany, which accounted for 68 percent of the total volume, was mainly responsible for the overall increase. Major destinations and quantities exported during the first ten months of 1953 (total 1952 exports in parentheses) were as follows:—Western Germany, 29,512 tons (6,232); Netherlands, 6,497 tons (11,967); Canada, 3,985 tons (488), and Switzerland, 3,110 tons (3,140).

Production of crude menhaden oil totaled 17,494,440 gallons for the eleven months ending with November, compared with the 1952 output of 12,888,640 gallons.

Fats and Oils Outlook for '54

The world has more fats and oils or their substitutes, than ever before and within the next year supplies will increase, according to the Food and Agricultural Organization (FAO) of the United Nations. FAO estimates production is increasing at the rate of 2 percent per year. Per capita production is only slightly below prewar and this gap is easily made up by the emergence of detergents. The use of fats and oils has increased in Latin America, Africa and some Asiatic countries, while decreases were noted in western Europe, the United States, Canada and other parts of Asia.

FAO stated that lard prices are expected to stay relatively high during the next year because of reduced output in the United States. Coconut oil is expected to remain high, but go no higher. In the United States cottonseed products and soybeans will be supported at slightly lower levels, it was predicted. On the world market, prices of olive, peanut, soybean, cottonseed and similar oils from non-dollar sources may decline moderately because of larger crops of Indian and African peanuts and olives in the Mediterranean area.

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Special Products Division

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